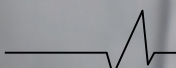


Evaluation and Management of the Sexually Assaulted or Sexually Abused Patient

Second edition



American College of
Emergency Physicians®

ADVANCING EMERGENCY CARE 

eBOOK

Evaluation and Management of the Sexually Assaulted or Sexually Abused Patient

2nd Edition

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Preface to the Second Edition

This handbook was first produced by the American College of Emergency Physicians in 1999. This project was an enormous undertaking at the time and was produced under its contract 98-0347(P) with the U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. Several key stakeholder organizations were assembled to produce and review this handbook (see next page).

Since the first production of this handbook, “A National Protocol for Sexual Assault Medical Forensic Examinations” was developed by the US Department of Justice/Office for Violence Against Women. This was revised in 2013. In addition, ACEP created the Forensic Medicine Section in 2009. One of the goals of the section was to revise and update this handbook. In 2011, the Forensic Medicine Section was awarded an ACEP Section Grant to accomplish this goal.

This handbook represents the work of several members of the section to revise and update the information provided. We are grateful to them for their work on this project. We also would like to thank ACEP for their continued dedication to the Section, its members, and to the victims we serve. Finally, we would thank the organizations listed below who graciously reviewed and commented on this 2nd edition of the handbook. We hope this becomes a valuable resource for ACEP Members.

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Project Co-Directors

American College of Emergency Physicians Evaluation and Management of the Sexually Assaulted or Sexually Abused Patient

Special Thanks

This document was first created under the leadership of the American College of Emergency Physicians (ACEP). The intent was to prepare a set of useful and practical recommendations that will standardize the evaluation and management of sexual assault patients. The following individuals represent the original participants in this process. The organizations they represented at the time are identified. ACEP extends its greatest appreciation to each of these individuals as well as the organizations they represented for participating in this extremely important project.

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We would like to extend a personal thank you for the following external reviewers of this handbook. Your comments and insights were invaluable in completing this project.

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Overview

To minimize unnecessary variations in care, the American College of Emergency Physicians (ACEP), in concert with a broad range of clinical, legal, forensic, judicial, advocate, and other organizations, has developed the following consensus approach to assist in the care of the patient presenting to the Emergency Department following sexual assault or sexual abuse.

Introduction

The evaluation of the sexually assaulted or abused patient, particularly those with cognitive impairment or young age, is a challenge for health care professionals. Appropriate management of the patient requires a standardized clinical evaluation, an effective interface with law enforcement for the handling of forensic evidence, and coordination of the continuum of care with a community plan. The clinician must address the medical and emotional needs of the patient while addressing the forensic requirements of the criminal justice system. Medical issues include treatment of acute injuries and evaluation for potential sexually transmitted diseases and pregnancy. Emotional needs include acute crisis intervention and referral for appropriate follow-up counseling. Forensic tasks include thorough documentation of pertinent historical and physical findings, proper collection and handling of evidence, and presentation of findings and conclusions in court.

How to use this Document

This handbook has been written to provide a consensus-based set of recommendations. When possible, evidence-based recommendations are incorporated. The main document contains the core elements. Attached modules provide additional information and instructional guidance in greater detail. Appropriate portions of the handbook should be adapted to the circumstances of the individual community consistent with federal, state, and local laws.

Definitions

For this handbook, **sexual assault** is defined as the sexual contact of one person with another without appropriate legal consent. This definition includes, but is not limited to, the range of behavior classified by state and federal law as rape, sexual abuse, and sexual misconduct (Module—Your State/Local Laws). Practitioners should refer to their state statutes for precise definitions of these terms in their particular jurisdictions.

Vulnerable target populations for sexual assault include children, adolescents, the elderly, developmentally delayed persons, patients with physical and/or mental impairments, and persons under the influence of drugs or alcohol. Persons in these groups may become involved in unlawful sexual activities because they do not understand what is happening, or they may lack the ability to give informed consent. **Sexual abuse** is often used as a term for the sexual assault of children and adolescents.

Development of a Community Response Plan

Sexual assault is a serious societal problem that creates significant challenges to local communities as they attempt to create an overall plan for meeting the medical, emotional, physical safety, and legal needs of the patient. Well-planned multidisciplinary community response plans have been demonstrated to be cost effective while diminishing further harm to the patient and providing comprehensive care (Module—Societal Costs of Sexual Assault). Sexual assault response/resource teams (SARTs) have also enhanced public safety by increasing public awareness, increasing reporting, and facilitating investigation.

Many different organizations and public agencies are crucial participants in an effective community-based sexual assault response plan. Key participants include, but are not limited to, medical and nursing personnel, patient advocates, college and school administrators, prosecutors, protective services personnel, law enforcement personnel, and forensic scientists (Module—Coordinated Community Response Plan). The SART creates a plan that addresses issues pertaining to the immediate response to sexual assault, but this is only the first step (Module—SART Development). Additional resources and planning for overall patient care, safety, and patient well being are necessary. Each community will need to consider options that work best for their setting, geography, and local resources.

At a minimum, professionals caring for sexual assault patients should be proficient in the core content of the evaluation and management of cases of sexual assault (Module—Minimum Core Content). The responsibilities and activities of each participant in the community plan should be clearly identified (Modules—Victim-Centered Responsibilities Matrix).

Clinical Considerations

Identification of sexual assault or sexual abuse

Identification of sexual assault is often difficult for many reasons. The sexually assaulted or abused patient often delays seeking medical evaluation due to feelings of shame, fear, or lack of understanding that they are victims of a crime. Delayed reporting may also result from the effect of drugs and/or alcohol ingested during a substance-facilitated sexual assault. Sexual assault by a person known to the patient tends to be underreported (Module—Special Issues in Sexual Assault). Adults who are sexually assaulted may seek medical care out of fear of infection or pregnancy. Alternatively, the adult patient may have nonspecific symptoms, such as sleep disturbance, nightmares, emotional lability, fatigue, self-blame, shame, fear, or sexual dysfunction. Children who are sexually assaulted or abused may display variable nonspecific symptoms and/or physical findings. Children who are sexually abused most often delay reporting, do not willingly disclose the abuse, and if the incident is disclosed, facts are often incomplete or conflicting (Module—Pediatric Patient Sexual Assault Examination).

Recent sexual assault is usually defined as sexual assault occurring within 72 hours of presentation to the Emergency Department. However, this interval may be extended as technology such as DNA analysis advances. Because some drugs can be found in the serum up to 1 week after ingestion, for the patient with substance-facilitated sexual assault, the collection of evidence can be performed longer after the assault than previously suggested. If the patient is in the out-of-hospital setting and the sexual assault is recent, the patient should be encouraged to go immediately to the Emergency Department, local rape crisis center, or other designated facility for an evidentiary examination to collect physical evidence. The patient should be instructed not to engage in activities that may destroy important evidence that can be used to identify the perpetrator, such as urinating, defecating, vomiting, douching, removing/inserting a tampon, wiping/cleaning genital area, bathing, showering, gargling, brushing teeth, smoking, eating, drinking, chewing gum, changing clothes, or taking medications. Non-evidentiary examinations may or may not be emergent. Non-emergent cases may be referred to appropriate local resources for collection of appropriate evidence or for follow-up care once the patient's immediate needs are met.

Clinical evaluation (Modules—Pediatric Patient and Adult/Adolescent Patient)

Policies and procedures for the evaluation and management of the patient with the complaint of sexual assault should be established by all sexual assault evaluation facilities. Sexual assault nurse examiner (SANE) programs are an excellent option for acute and chronic sexual assault evaluations, because they standardize the sexual assault evaluation and collection of evidence. Special attention and supervision must be provided if resident physicians are involved in sexual assault evaluations to ensure timely, efficient, and standardized treatment. Standardized programs that include a competency assessment (reviewing local, legal, clinical, and follow-up issues) should be established in training institutions and should include a minimum number of supervised examinations.

If present, life-threatening injuries must be treated first. The lack of physical injury does not necessarily indicate consensual sexual contact. Once stabilized, the patient should be placed into a private room as soon as possible. A specially trained individual who can provide crisis intervention, such as a rape crisis advocate, mental health professional, social worker, or pastoral caregiver, should be available for emotional support. If desired by the patient, a friend or relative may be present. Throughout the encounter, privacy, safety, and confidentiality must be ensured (Module—Privacy and Confidentiality). Ideally, the information in the medical record should be available to outside authorities only with the consent of the patient. However, in some jurisdictions, law may mandate disclosure of the medical record.

In most states, the sexually assaulted adult patient is not required to report the assault to law enforcement authorities. In contrast, in some states, medical personnel are required by law to report all cases of sexual assault. Most states

mandate the reporting of sexual abuse of children to police or to the child protection agency. However, in many jurisdictions, police coordinate and oversee the collection of evidence. Recent changes to the Violence Against Women Act (VAWA) mandate that victims have the ability to request a forensic medical examination and evidence collection regardless of their decision to report to law enforcement. The law also allows for kits to be collected anonymously under the Jane Doe statute.

Informed consent or refusal should be obtained for each of the following components of the sexual assault evaluation.

- Medical evaluation and treatment
- Reporting the crime
- Performing a physical examination
- Photodocumentation
- Evidence collection: The patient has the right to decline the collection of any and all specimens. However, to give the patient the ability to make an informed decision, it is important to explain to the patient that the ability to collect viable evidence declines with time
- Transferral of evidence to law enforcement personnel

Programs should have policies in place to handle forensic medical examination and evidence collection in patients who are unconscious or unable to give consent (Module—Special Populations).

In many jurisdictions, hospitals are not required by law to perform examinations on suspected perpetrators without a court order or alternative means of legally mandating such an examination. Persons placed under arrest do not have the right to refuse an examination for the collection of evidence if the officer has a court order. Because states vary in requirements, check your local statutes.

In pediatric cases, check local and state laws regarding the ability of minors to consent to treatment. In some areas, it is necessary to obtain parental consent to provide treatment. In some states, if parental abuse is suspected (e.g., the child is brought by a child care worker or teacher) the examination may be performed without parental consent.

Determination of consent to perform a sexual act is a legal principle and therefore not part of the assessment. One of the fundamental tenets of the forensic examination is objectivity. The goal of a forensic examination is to comprehensively and objectively document all findings.

History (Modules—Pediatric Patient and Adult/Adolescent Patient)

Whenever possible, use open-ended (non-leading) questions and encourage free narrative. Special care is needed in obtaining the history of the pediatric patient (Module—Pediatric Sexual Assault Examination). Document the following:

1. Specifics of the incident: Document direct quotes from the patient describing the incident
 - a. Time, date, and place of the sexual assault or abuse
 - b. The patient’s ability to give consent to the reported sexual activity
 - c. Use of force, threats of force, weapons, coercion, or drugs and/or alcohol to facilitate sexual assault
 - d. Types or means of assault
 - e. Number of assailants
 - f. The occurrence of penetration of any body part with a penis, finger, or other object
 - g. Did the patient urinate, defecate, vomit, douche, remove/insert a tampon, wipe/clean the genital area, bathe, shower, gargle, brush teeth, smoke, eat, drink, chew gum, change clothes, or take medications after the incident?
 - h. Did the patient bite the perpetrator, or was the patient bitten?
2. Medical history
 - a. Allergies
 - b. Medications
 - c. Immunizations
 - d. Past medical history

3. Additional pertinent history
 - a. Use of contraceptives and what type
 - b. Last menstrual period
 - c. Last consensual intercourse
 - d. Pregnancy status
 - e. History of anogenital surgery

Physical examination

The examiner should prevent cross-contamination of evidence by changing gloves whenever cross-contamination could occur. Clearly document all findings.

1. Before the patient undresses, place a clean hospital sheet on the floor to be a barrier for the collection paper (Module—Adult/Adolescent Patient).
2. Allow the patient to remove and place each piece of clothing being collected in a separate paper bag. Handle all clothing with gloved hands to prevent contamination of evidence (Module—Adult/Adolescent Patient).
3. Simultaneously note the presence of any physical injury, biological evidence, or foreign debris.
4. Photograph and recover any trace evidence, including sand, soil, leaves, grass, and biological secretions. Note the body location of the collection. Identify moist secretions.
5. Note all injuries by documenting the location, size, and complete description of any trauma, including bite marks, strangulation injuries, or areas of point tenderness, especially those occurring around the mouth, breasts, thighs, wrists, upper arms, legs, back, and anogenital region (Module—Bite Mark Guidelines).
6. Perform appropriate photodocumentation of collection sites and injuries before evidence collection (Module—Forensic Photography).
7. Recover moist secretions with a dry swab. Dry secretions should be moistened with a damp swab and then recovered with a dry swab. Debris should be scraped onto a bindle.
8. Document the Tanner Stage of the patient and describe the level of physical maturity (Module—Pediatric Patient).
9. Based on the history obtained, follow the instructions for the pertinent portions of the sexual assault evidence collection kit (Module—Adult/Adolescent Patient).
 - Toluidine blue dye may be used to identify minor external genital and anal injuries, but it may cause discomfort (burning) (Module—Special Examination Tools and Techniques).
 - When the vaginal examination is performed, the speculum should be lubricated with tap water because other lubricants may affect test results. A vaginal speculum is never used in prepubertal children without general anesthesia.
 - When substance-facilitated sexual assault is suspected, blood and/or urine should be collected.¹
 - If alcohol was ingested, use the law enforcement blood alcohol collection kit or collect three fluoride (gray top) tubes. Check with local law enforcement for the kit
 - If a drug was ingested within 36 hours of examination, collect three full fluoride (gray top) tubes of blood and 100 ml of nonprepped, first-void urine. If a drug was ingested more than 36 hours before the examination, collect 100 ml of nonprepped, first-void urine. Do NOT place urine or blood in the sexual assault kit. Package each item separately, label and seal, and initial each package.

Hospital Laboratory and Radiographic Data

Consider tests that may be appropriate for a given patient:

1. Serum or urine pregnancy test.
2. Cultures and syphilis testing: In cases where prophylaxis will be given and chronic abuse is not suspected, cultures and syphilis testing are not necessary. This area is very controversial (Module—Adult/Adolescent Patient).
3. Hepatitis B surface antibody: To check for the immune status in the previously immunized patient. Hepatitis B testing is not indicated in the nonimmunized patient (Module—Prophylaxis Care after Sexual Assault).
4. Laboratory and radiographic studies as indicated.
5. HIV counseling and follow-up testing (Module—Human Immunodeficiency Virus). Referral is strongly encouraged. Patients may be referred to the primary care provider or to a center that provides confidential counseling and testing within 72 hours of the exposure to establish the HIV status at the time of the assault or abuse.
6. HIV Risk Assessment and Screening: Patients should be assessed for risk of HIV transmission following assault.

Chain of Evidence/Chain of Custody

Note: Ensure that chain of custody is maintained for all samples collected during the medical forensic examination.

Document all historical and physical findings. Properly seal and initial all specimens and label with:

- Hospital name, patient name, and patient identification number
- Date and time of evidence collection
- Description and location of the body part of origin of the evidence
- Name and signature of the person collecting the evidence

All transfers of custody of evidence must be accounted for by keeping a written record of:

- Name and signature of the person receiving the evidence
- Date and time of the transfer

References

1. LeBeau M, Andollo W, Hearn WL, et al. Recommendations for toxicological investigations of drug-facilitated sexual assaults. *J Forensic Sci* 1999;44(1)227–230.
2. <http://soft-tox.org/sites/default/files/DFSA-Fact-Sheet.pdf>.

Chain of Evidence/Chain of Custody Form

On _____ at _____ (am or pm) the
(Date) (Time)

following items were given to _____
(Police Officer/Person Receiving)

of the _____
(Police Department/Agency)

EVIDENCE RECEIVED

Check **YES** or **NO** for all items (if no, explain)

Clothing (list)

- | | | |
|--------------|------------------------------|-----------------------------|
| Shirt/Blouse | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Pants/Slacks | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Bra | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Underpants | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Jacket/Coat | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Other | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

- | | | |
|----------------------------------------|------------------------------|-----------------------------|
| Sexual Assault Evidence Collection Kit | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Tampon/Sanitary napkin included | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Drug Facilitated Sexual Assault Kit | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

Other evidence: YES NO

If YES, describe _____

Evidence secured in locked cabinet in forensic room by _____
Date _____ Time _____ am/pm

Received from _____
Date _____ Time _____ am/pm

Received by _____
Date _____ Time _____ am/pm

Received from _____
Date _____ Time _____ am/pm

Received by _____
Date _____ Time _____ am/pm

Date _____ Time _____ am/pm

Table of Contents

Chapter 1. Sexual Assault and Society	15
<i>Heather V. Rozzi, MD, FACEP</i>	
Your State/Local Laws	15
Societal Costs of Sexual Assault	15
Coordinated Community Response Plan	16
Sexual Assault Response/Resource Team (SART) Development	17
Victim-Centered Responsibilities Matrix	19
Victim-Centered Responsibilities Matrix	20
Chapter 2. Sexual Assault Nurse Examiner (SANE) Development	21
<i>Sheila Steer, MD and Valerie Prulhiere, RN</i>	
Rape in the United States	21
Demonstrating the Need for SANE Programs	22
History of SANE Program Development	23
Chapter 3. Minimum Core Content	25
<i>Wendy Wooley, DO</i>	
Chapter 4. Special Issues In Sexual Assault	27
<i>Nicole K. Schaller, RN, BS, SANE-A, SANE-P and Derek J. Schaller, MD</i>	
Acquaintance Rape	27
Special Populations (also see Module—Special Populations)	27
Drug-Facilitated Sexual Assault (DFSA)	28
Chapter 5. Working with Law Enforcement	29
<i>Nicole K. Schaller, RN, BS, SANE-A, SANE-P and Derek J. Schaller, MD</i>	
Physician’s Role	29
Chapter 6. Privacy and Confidentiality	31
<i>Ralph Riviello, MD, MS, FACEP</i>	
HIPAA Exceptions	31
Research and HIPAA	32
Privacy and Law Enforcement Officers	32
Privacy and Photography	33
Confidentiality and ACEP	33
Chapter 7. Injury in Sexual Assault	35
<i>Monique Sellas, MD</i>	
Physical Injury	35
Genital Injury	35
Sexual Assault and Injury: Research Study Matrix	37
Chapter 8. Documentation	39
<i>Tiffany Bombard, BA, NREMTP and Shellie Asher, MD, MS</i>	
Accounts of Victims or Witnesses	39
Past Medical History	39
History of the Present Illness	40
Physical Examination	41
Diagnostic Studies	41
Assessment and Plan	41
Chapter 9. Adult/Adolescent Patient Sexual Assault Examination	43
<i>Maura Dickinson, DO and Judith A. Linden, MD, FACEP</i>	
Patient Notification	43
Patient Consent	43
Distribution of Forensic Medicolegal Report	44

Chapter 10. Adult/Adolescent Sexual Assault Forensic Medical Report	45
<i>Judith Linden, MD and Maura Dickinson, DO</i>	
Patient Demographic Information	45
Law Enforcement Information	45
Patient History	45
Assault History	46
General Physical Examination and Findings	47
Genital Examination—Female	48
Genital Examination—Male	49
Document Specimens Submitted to the Forensic Laboratory	50
Personnel Involved in Sexual Assault Evaluation	50
Overall Clinical Assessment	50
Law Enforcement Information	50
Patient Discharge	50
Chapter 11. Male Patient Sexual Assault Examination	51
<i>Phillip Peterson, MD, and Ralph Riviello, MD, MS, FACEP</i>	
Introduction	51
Epidemiology	51
History	52
Physical Examination and Injury Detection	52
Disposition	53
Chapter 12. Pediatric/Adolescent Patient Sexual Assault Examination	55
<i>Dale P. Woolridge, MD, PhD</i>	
Normal Physical or Congenital Findings that Can Be Confused with Child Sexual Abuse	55
Physical Findings in Child Sexual Abuse	55
Conditions and Injuries that Can Be Confused with Child Sexual Abuse	56
Physical Examination Findings Consistent with Child Sexual Abuse	56
Guidelines for Interviewing Children	57
Sexual Abuse Forensic Medical Report	58
Developmental Staging	64
Chapter 13. Special Examination Tools and Techniques	67
<i>Chamé Blackburn, MD and Lindsay Stokes, MD</i>	
Colposcopy	67
Anoscopy	67
Foley Catheter Technique	68
Toluidine Blue Staining	68
Alternate Light Source	68
Chapter 14. Prophylaxis Care after Sexual Assault	71
<i>Sally Awad, MD</i>	
Adult/Adolescents	71
Children	72
Human Immunodeficiency Virus (HIV)	75
Emergency Contraception (EC)	76
Chapter 15. Bite Mark Guidelines	79
<i>Ralph Riviello, MD, MS, FACEP</i>	
Emergency Department Evaluation	80
Chapter 16. Strangulation	83
<i>William M. Green, MD, FACEP</i>	
A Complexity of Challenges	83
Basic Physiology	83
Mechanisms and Definitions	84
Pathophysiology	84
Clinical Symptoms	85
Clinical Findings	86
Management and Documentation	87

Clinical Manifestations—CAUTION! 88
 Evolving Clinical Approach 88
 Clinical Evaluation in the ED 88
 Documentation Chart for Attempted Strangulation Cases 89
 Questions to ASK: Method and/or Manner 90

Chapter 17. Forensic Photography: Overview of Basic Principles for Health Care Professionals ... 91
William M. Green, MD, FACEP
 Utility of Forensic Photography 91
 Utility of Forensic Images 91
 Digital Forensic Photography 91
 Forensic Imaging for Non-Professional Photographers 91
 Admissibility of Digital Photographs 92
 Basic Forensic Photography: Principles and Techniques 93

Chapter 18. Quality Assurance for Sexual Assault Services 95
William M. Green, MD, FACEP
 Improving Practice and Promoting Effective Community Partnerships 95
 Quality Assurance: Basic Definition 95
 SAFE Team Quality Assurance 96
 Peer Review 97
 SART Quality Assurance 97
 Patient Satisfaction Surveys 98
 Evaluation of Outcomes 98

Chapter 19. Forensic Laboratory Testing 99
Rebecca Hierholzer, MD, FACEP
 General Rules for Forensic Evidence Collection (Module—Adult/Adolescent Patient) 99
 Evidence Collection Kits 100
 Use and Quality Control of Desiccant Packs¹ 100

Chapter 20. Cultural and Linguistic Aspects of Sexual Assault Care 101
Michael L. Weaver, MD, FACEP

Chapter 21. Special Populations 107
Heather V. Rozzi, MD, FACEP
 Elderly Victims 107
 Victims with Physical and Cognitive Disabilities 107
 Lesbian/Gay/Bisexual/Transgender Victims 107
 Prisoners 108
 Intoxicated or Unconscious Patients 108

Chapter 23. Suspect Examination 109
Mary Carr, MD
 Payment 109
 Documentation 109
 Evidence Kits 109
 Facility 109
 Consent 109
 Examination 110
 Suggested Suspect Exam Protocol 111

Chapter 23. Testimony 113
Tiffany Bombard, BA, NREMTP and Shellie Asher, MD, MS, Albany Medical College 113
 Order of Events 113
 Preparation for Trial 114
 Arriving in Court 114
 During the Trial 115
 Summary 116

Appendices 117

Chapter 1

Sexual Assault and Society

Heather V. Rozzi, MD, FACEP

Your State/Local Laws

State and local laws regarding rape and sexual assault vary from jurisdiction to jurisdiction. In addition to criminal statutes and local protocols, some states have regulations that govern management of the rape survivor in the emergency department. It is important to review your state and local laws and rules and regulations before developing sexual assault policies and programs. It is beyond the scope of this handbook to list every state law and guideline.

The following agencies can be sources to obtain your state and local laws:

1. Local police department
2. Local sheriff's department
3. Departments of public safety and public health
4. Local district attorney's office
5. Local protective and regulatory agencies
6. State attorney general's office
7. State protective and regulatory agencies (children, disabled, and elderly)
8. National Association of Attorneys General (NAAG): www.naag.org

Societal Costs of Sexual Assault

Although placing a dollar value on the suffering that results from sexual violence may seem cold and impersonal, such information is useful in the public policy arena. Overall, rape has the highest annual victim costs at \$127 billion per year (excluding child sexual abuse). It has been estimated that each sexual assault costs approximately \$151,423.¹ Costs to society include expenses to the criminal justice system, social costs associated with fear of crime, and private security expenditures. Society also directly bears the costs of crime, which are reimbursed by insurance coverage. To the victims, many of the costs are nonmonetary losses, such as fear, pain, suffering, and lost quality of life. Fifty percent of sexual violence victims quit or were forced to leave their jobs in the year following their assaults due to the severity of their reactions.²

Rape in the United States Patient Cost	
Productivity	\$ 2,200
Medical care	500
Mental health care	2,200
Police/fire services	37
Social/victim services	27
Property loss/damage	100
Quality of life	81,400
Total (per patient)	\$ 86,464

Source: Miller, Cohen, Weirsema. *Victim Costs and Consequences: A New Look*. National Institute of Justice, January 1996.

The establishment of a victim-focused, multidisciplinary, multiagency approach to the treatment and evaluation of victims of sexual violence can help to minimize the physical and psychological trauma sustained by these victims. Programs embracing a team approach to sexual assault exist across the country. These programs have been shown to: (a) increase reporting in the community; (b) improve quality of evidence collected; (c) decrease waiting time for the victims to be examined; and (d) increase the number of cases settled by plea bargaining.



Coordinated Community Response Plan

- Survivors
- Health care workers: physicians, registered nurses, SANEs, and forensic odontologists
- Law enforcement personnel: municipal, county, state, and federal levels
- Prosecutors: city and state prosecutors, U.S. attorneys
- Judiciary personnel
- Defense attorneys (both public and private)
- Forensic laboratory personnel (including toxicologists and pharmacologists)
- Corrections/probation personnel
- Sex offender treatment providers
- Mental health organizations
- Educators
 - Medical schools, colleges, high schools or elementary schools
- Nursing / PA / NP organizations, emergency medical services organizations
- Legislators and government policy makers
 - State / municipal legislators
 - Public health agencies
 - Criminal justice agencies
- Other groups
 - Members of community hospital associations
 - Religious leaders
 - Racial and cultural groups
 - Organizations that assist runaways
 - Media and business community
 - Specialty groups, including senior citizens and the disabled (mental, physical)
 - Commission on Women

Coordinated Community Response Plan

Coordinated Community Response

Coordinated community response (CCR) may be defined as a community plan that incorporates all aspects of sexual assault response. The CCR often begins with the SART, moves on to post-event needs (victim safety and well-being, effective criminal prosecution of perpetrators) and eventually to violence prevention. A CCR must be configured to meet the needs of the area it serves. Any organization or agency with an interest or a responsibility for sexual assault victims or for the successful prosecution of sexual assault perpetrators should be considered for membership in the CCR group.

Group members may include support organization representatives as well as individuals who have relevant expertise or experience. The formation of advisory committees may be useful to provide the CCR group with unique insights into the problems of a specific victim population such as individuals with disabilities or gay and lesbian sexual assault victims. An advisory committee can also provide guidance in such areas as dealing with the media or drawing on the resources available through religious institutions, computer technology, or medical providers.

Responsibilities of Community Response

- **Education:** Educate the general public about sexual assault, with a focus on prevention, risk reduction, and the existence of available services for survivors.
- **Training and Technical Assistance:** Assist all involved sexual assault response professionals to treat survivors from all backgrounds with compassion and respect.
- **Protocol Development:** Establish procedures through which all involved agencies are accountable for their participation in the CCR.
- **Services:** Ensure that survivors of all backgrounds, sexual orientations, and cultures have access to services that include 24-hour crisis intervention, short-term counseling, and advocacy in legal, medical, and other systems.
- **Public Policy Advocacy:** Work toward policy and legislative changes to eliminate sexual assault, ensure justice and safety for survivors, and hold offenders accountable. This includes the amendment of state statutes, protocols, or memoranda of understanding to best protect the needs and rights of survivors of sexual assault.
- **Dissemination of Materials:** Develop and distribute materials tailored to different cultural/language/religious groups with the goal of making the general public aware of available services.
- **Evaluation:** Assess the community response, including the effectiveness of the SART, by soliciting input from survivors and reviewing data, with the goal of improving the existing systems. This helps communities to identify the strengths and weaknesses of their particular sexual assault response plan.

Who should be involved in a coordinated committee response?

Coordinated community response teams should be multidisciplinary and multiagency. The team may be composed of the following groups or organizations:

- Victim advocates
 - Community-based (rape crisis center)
 - Court-based (prosecutor's office)
 - Office for Victim Compensation
 - State sexual assault coalition

Sexual Assault Response/Resource Team (SART) Development

What persons and agencies should be members of a SART?

Ideally, core SART members consist of:

1. **Sexual Assault Forensic Examiners:** A registered professional nurse, physician, or forensic odontologist licensed in the state who has successfully completed a course of training in the performance of evidentiary examinations
2. **Law Enforcement Officers**
3. **Patient Advocates**
4. **Prosecutors**
5. **Forensic Laboratory Personnel**

Once the key players have been identified and are involved, the following items will need to be addressed:

- Medical facilities that will participate in the SART process
- Resources and equipment that will be needed by the SART team members (i.e., standardized evidence collection kits, alternate light source, camera, colposcope, appropriate documentation tools)
- Identification of available state and local funding sources
- Assessment of other SART or SANE programs in your state and across the country

Initial Assessment of the Current Situation

It is important that the involved parties critically evaluate the current response to sexual assault patients before initiating a new program. Important factors to consider include:

- Comparison of crime statistics within the community as captured by the various represented agencies (this will capture both sexual assaults reported to law enforcement and those *not* reported)
- Consideration of the adequacy of policies and protocols pertaining to each aspect of the existing response plan
- Review of feedback from survivors about their experiences and satisfaction with the response by police, advocates, and medical providers
- Review of specific problems or systemic breakdowns that have occurred
- Assessment of the capacity of each discipline to support a coordinated response
- Assessment of the effectiveness of the current response to patients of underserved populations or in certain types of cases (i.e., non-stranger versus stranger assaults)
- Assessment of the adequacy of agency and multidisciplinary training and resource materials
- Assessment of the adequacy of medical facilities and availability of forensic examiners
- Review of current mechanisms to communicate, monitor cases, and problem solve among the agencies

How does a SART process facilitate the immediate response to sexual assault situations?

As noted above, sexual assault forensic examiners, law enforcement officers, and patient advocates are participants in the immediate response team, or SART. At a minimum, the SART process should ensure the coordination of the following activities:

- Contact with each team member to alert him or her to the need for services (i.e., the 911 operator calls the police officer, the officer calls the hospital and on-call staff, and hospital staff calls the advocate)
- Patient transportation to and from the medical facility in a timely manner
- Prompt response of the team
- Initial communication between the members to share case information and determine evidence collection needs, address special concerns, and reduce the need to duplicate questions
- Patient interviews with police and medical personnel
- Access to medical forensic examination
- Provision of support, information, and materials to the patient, plus assistance with safety planning
- Patient accompaniment by other support person during interviews and medical forensic examination should be considered with the consent of the patient
- Communication among the involved SART members at the close of the examination to discuss follow-up concerns, action plans, and findings

- Provision of clothing and toiletries for the patient
- Transportation of patient to a safe place
- Support and information to the patient’s significant others, as appropriate
- Proper and timely storage and delivery of forensic evidence utilizing chain of custody protocols
- Contact with other SART members (judiciary personnel and forensic laboratory personnel) to discuss their involvement in the case
- Follow-up contact and assistance to the patient
- Trouble shooting on specific issues (e.g., crime victim compensation)
- Communication on individual case progress and the overall effectiveness of the SART process

AN EXAMPLE OF A SART PROCESS

- Law enforcement is notified of the sexual assault. If the patient initially presents to a health care facility, in most jurisdictions, consent of the adult patient is required prior to notification of law enforcement.
- The patient advocate is advised of the sexual assault.
- The medical forensic examination process begins.
- The patient advocate provides hospital accompaniment and gives referrals for community resources, crisis counseling, and patient-witness assistance.
- Initial closure is completed between hospital staff and law enforcement.
- Disposition of evidence is made to appropriate agencies or evidence is stored following chain of custody protocols.
- The case is referred for investigation.
- Depending on case facts, the investigation is referred to the district or city attorney’s office.
- Judicial proceedings begin.

Keys to keeping the system working

In addition to working toward constant improvement in responses to individual patients, coordinators of the SART should undertake any necessary ongoing steps to refine and change the system:

- Develop multidisciplinary/multiagency protocols that define the roles and responsibilities of the members and that support the SART function
- Initiate training, supervision, and professional development of team members
- Develop forms/checklists to standardize documentation, evidence collection, and patient notification of rights
- Create mechanisms to increase communication among agencies during the immediate response
- Develop mechanisms to promote monitoring and problem solving in individual cases
- Create brochures and written materials for the community and patients to explain the SART process (written in understandable terms and in multiple languages)
- Effect specialized outreach programs to encourage patients from underserved populations to seek SART services
- Provide mechanisms to build professional and public support for the SART to increase patient referrals
- Create a mechanism to obtain patient feedback to evaluate SART process effectiveness
- Develop programs to assist patients beyond the immediate response

References

1. DeLisi M. Murder by numbers: Monetary costs imposed by a sample of homicide offenders. *Journal of Forensic Psychiatry and Psychology* 2010 (21) 501–513.
2. Ellis EM, Atkeson BM, Calhoun KS. An assessment of long-term reaction to rape. *Journal of Abnormal Psychology*. 1993 (90) 263–266.

Victim-Centered Responsibilities Matrix

Critical Elements For Sexual Assault Crime Response								
Instructions	Advocate	Medical	Law Enforcement	Prosecutors	Victim Witness	Courts	Corrections	Problem Area
Place a “P” in the column where the primary responsibility exists. Place a check mark (✓) under any other column that may share or possess follow-up responsibility. If you have a critical element that is not being adequately addressed or inherently causes problems, or you would like to more fully discuss this element, place an asterisk (*) in the “problem area” column.								
Receive Victim Report of Sexual Assault								
Ensure safety								
Educate regarding options: reporting, medical care, legal								
Determine need/willingness for emergency medical care								
Arrange transportation to/from hospital								
Advise victim of evidence preservation steps								
Determine if assailant is still nearby								
Determine if victim wants crisis counseling								
Determine if victim wants victim assistance								
Work with secondary victims								
Medical Intake								
Record victim’s statement/condition accurately								
Determine extent of injuries requiring medical attention								
Inform victim about evidence collection procedures and obtain consent								
Determine if victim wants advocate support during examination								
Forensic Examination								
Collect and preserve evidence in accord with established protocol								
Provide clothing if necessary								
Minimize patient discomfort								
Medical Concerns Related to Sexual Assault								
Administer pregnancy prevention treatment with consent								
Administer prophylactic treatment for STDs with consent								
Obtain blood sample for HIV baseline status with consent								
Referral for further medical care								
Referral for psychological counseling								
Review financial issues (victim’s compensation, etc.)								
Initial Interview								
Determine interview information needed								
Develop strategy to avoid multiple interviews								
Ask victim preference of interviewer gender								
Determine if victim requires interpreter								
Provide comfortable, private setting for interview								
Determine if victim wants to file a complaint and move toward prosecution								

Victim-Centered Responsibilities Matrix

continued from page 19

Critical Elements For Sexual Assault Crime Response							
Instructions Place a "P" in the column where the primary responsibility exists. Place a check mark (✓) under any other column that may share or possess follow-up responsibility. If you have a critical element that is not being adequately addressed or inherently causes problems, or you would like to more fully discuss this element, place an asterisk (*) in the "problem area" column.							
Investigation							
Determine location of crime							
Crime scene/victim evidence: fingerprints, trace evidence, photographs, clothing, sheets, etc.							
Search warrants							
Suspect kit							
Keep victim informed of case status							
Address victim's concerns of safety							
Arraignment/initial appearance							
Notify victim of time and place of hearing							
Discuss desired conditions of release with victim before bail hearing							
Request any release on bail include protection orders for victim							
Pretrial							
Inform victim of pretrial hearings/motions							
Include victim's participation in all hearings in which defendant has a right to be present							
Consider needs of victim in scheduling proceedings							
Plea Negotiations							
Inform victim of reasons to consider a negotiated plea							
Describe optional courses of action							
Determine what action the victim wants to take							
Consider the needs of the victim in accepting a plea							
Sentencing							
Ensure opportunity for victim impact statement as part of sentence considerations							
Include victim needs as part of sentence (i.e. restitution, protection, emotional security)							
Incarceration							
Notify victim about changes in offender status							
Notify victim of scheduled parole hearings							
Provide opportunity for victim testimony at parole hearings							
Notify victim of release and status of release (i.e. parole, discharge, etc.)							

Adapted from: *Looking back, moving forward: A program for communities responding to sexual assault.* National Center for Victims of Crime, 1992

Chapter 2

Sexual Assault Nurse Examiner (SANE) Development

Sheila Steer, MD and Valerie Prulhiere, RN

Even though rape has likely occurred for as long as man has existed (Brownmiller: 75), there has only been a concerted effort to better understand the issue and better meet the needs of survivors since the early 1970s. One of the first researchers to systematically study the impact and needs of this population was a nurse, Dr. Ann Burgess (Burgess & Holmstrom: 73). She identified a pattern of response which she referred to as Rape Trauma Syndrome (Burgess & Holmstrom: 74). Dr. Burgess has remained actively involved in furthering the scientific understanding of rape.

Rape in the United States

The 2010 Uniform Crime Report indicates that 84,767 women were forcibly raped in the United States in 2010. This represents a 5.5% decrease in reported rapes from 2009, and a 13.8% decrease from 2001. Even though the numbers are declining, this figure still indicates that in 2010 27.5 of every 100,000 women in the United States were the victims of a forcible rape and reported the crime to the police. The 2010 Unified Crime Report crime clock statistic reflects one forcible rape every 6.2 minutes in the US in 2010. More rapes occurred in cities outside large metropolitan areas, where the rate was 41.6 victims per 100,000 population, compared with 27 per 100,000 in large metropolitan areas communities (Uniform Crime Report: 2010). Geographically, 37.7% of the 2010 forcible rapes occurred in the most heavily populated southern states, 24.6% in the midwestern states, 25.1% in the western states, and 12.7% in the northeastern states.

The 2011 Preliminary Annual Uniform Crime report indicates there was a decline in all regions of the country except in cities with a population of 500,000-999,999 which showed a 0.5% increase in forcible rape. In the same report, the data showed a 6.8% decline in metropolitan counties and an even greater 9.0% decline for the non-metropolitan counties. The northeast experienced a 2.2% decline and Midwest states experienced a 4.2% decline, the south a 2.7%, and the west a 6.6% decline in reported forcible rapes. The highest reporting rate occurred in August and the lowest reported rate was in December (Uniform Crime Report: 2010).

In 2012, the US Department of Justice revised the definition of rape used in the Uniform Crime Report. The new, more inclusive definition better reflects the criminal codes and is expected to more accurately reflect the number of victims. The new definition is "the penetration, no matter how slight, or the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim". The new definition focuses on various forms of sexual penetration and includes all victims regardless of gender or age.

It is important to remember that the actual rate remains unknown. From 2006-2010 it is estimated that 65% of rapes or sexual assaults were not reported (<http://bis.ojp.usdoj.gov>) Estimates of the number of women who are actually raped range from an additional four to an additional nine victims for every one woman who reports. In one program, while approximately 20% of victims are uncertain about reporting when they first came to the emergency department (ED), working through their fears and concerns with a knowledgeable SANE has allowed 95% of these survivors to report (Ledray: 92a).

As with all Crime Index offenses, reports of forcible rape are sometimes considered "unfounded" by law enforcement and they are then excluded from the crime count. The rate of "unfounded" cases is interestingly higher for rape than for any other index crime. The assumption is that all "unfounded" cases are false reports, deceitfully reported even though no actual rape occurred. However, this is not necessarily the case. Reported rape cases are actually classified by police as "unfounded" for a variety of reasons.

While the use of this classification varies greatly from one community to another, it is often used in the following situations:

- The police are unable to locate the victim
- The victim decides not to follow through with prosecution
- The victim repeatedly changes the account of the rape
- The victim recants
- No assailant can be identified
- The police believe no rape occurred

There are also a variety of other situations that impede or prevent completion of the investigation and in which the case may be classified as “unfounded” (Aiken: 93). Unfortunately, not everyone distinguishes between “changing the story” and recalling additional data or telling different aspects of the same story, or the difference between an untrue rape and a victim who is so fearful of the assailant that she recants her story out of fear for her life or the life of her family. The number one reason victims give for not wanting to report is fear of the assailant, whose parting words in 76% of the cases were, “If you tell anyone...(or report to the police), I’ll come back and kill you...rape you again...rape your child” (Ledray: 96a).

Unfortunately, only 35 of rapists go to jail either as the result of guilty pleas or guilty verdicts (www.rainn.org).

Violence has a significant impact on the physical and psychosocial health of millions of Americans every year. Since women are so often the victims of violence, it is essential that women who present to emergency departments for even minor trauma be thoroughly evaluated. ED staff must be aware of the types of injuries most likely resulting from violence, and the victim must be asked privately about the cause of the trauma to determine if it is the result of violence, and if further evaluation is required (Sheridan: 93). When violence such as rape is identified, specially trained staff need to be available to provide service. Only in 1992 did the guidelines of the Joint Commission on the Accreditation of Health Care Organizations (JCAHO) first require emergency and ambulatory care facilities to have protocols on rape, sexual molestation and domestic abuse (Bobak: 92).

The landmark Violence Against Women Act (VAWA) of 1994 was introduced by Senator Biden and signed into law on September 13, 1994, as Title IV of the Violent Crime Control and Law Enforcement Act of 1994. In addition to doubling the federal penalties for repeat offenders and requiring date rape be treated the same as stranger rape, this act made \$800 million dollars available for training and program development over a sixyear period, with \$26 million appropriated for the first year. This was an important recognition of the need for additional services for crime victims.

Conservatives have repeatedly challenged the constitutionality of VAWA since its inception. In 2000 the civil rights remedy of VAWA was ruled unconstitutional by the Supreme Court but the program funding under VAWA was unaffected. (*United States v. Morrison*, 529 U.S. 598,627). In 2012-2013, VAWA faced its toughest battle in Congress, but it was finally passed.

Fortunately, women’s groups had been working to provide services to victims of violence, such as rape and domestic abuse, before large sums of money were available to support these grassroots programs. Rape centers began to be established across the country in the early 1970s, primarily utilizing volunteer staff. While the sexual assault recovery movement and most rape centers continue to depend upon volunteer labor, more money is becoming available to pay staff. Goodyear (1989) suggests that staff must be paid for their work with rape victims.

Demonstrating the Need for SANE Programs

The impetus to develop SANE programs began with nurses, other medical professionals, counselors, and advocates working with rape victims in hospitals, clinics, and other settings across the country. It was obvious to these individuals that services to sexual assault victims were inadequate, and not at the same high standard of care as other ED clients (Holloway & Swan: 93) (O’Brien: 96). When rape victims came to the ED for care they often had to wait as long as four to twelve hours in a busy, public area, their wounds seen as less serious than the other trauma victims, competing unsuccessfully for staff time with the critically ill (Holloway & Swan: 93) (Sandrick: 96) (Speck & Aiken: 95). They were often not allowed to eat, drink, or urinate while they waited, for fear of destroying evidence (Thomas & Zachritz: 93). Doctors and nurses were often not sufficiently trained to do medicallegal exams, and many were

also lacking in their ability to provide expert witness testimony (Lynch: 93). Even when they had been trained, staff often did not complete a sufficient number of exams to maintain their level of proficiency (Lenehan: 91) (Yorker, 96) (Tobias: 90). Even when the victim’s medical needs were met, their emotional needs all too often were overlooked (Speck & Aiken: 95), or the survivor was blamed for the rape by the ED staff (Kiffe: 96).

Typically, the rape survivor faced a time consuming, cumbersome succession of examiners for one exam, some with only a few hours of orientation and little experience. ED services were inconsistent and problematic. Often the only physician available to do the vaginal exam after the rape was male (Lenehan: 91). While approximately half of rape victims in one study were unconcerned with the gender of the examiner, for the other half this was extremely problematic. Even male victims often prefer to be examined by a woman, as they too are most often raped by a man and experience the same generalized fear and anger towards men that female victims experience (Ledray: 96). (Note: several SANE programs currently employ male SANEs who care for all victims of sexual violence)

There are also many anecdotal and published reports of physicians being reluctant to do the exam This was due to many factors, including their lack of experience and training in forensic evidence collection (Bell: 95) (Lynch: 93) (Speck & Aiken: 95), the timeconsuming nature of the evidentiary exam in a busy ED with many other medically urgent patients (DiNitto: 86) (Frank: 96), and the potential that if they completed the exam they were then vulnerable to being subpoenaed and taken away from their work in the ED to testify in court and be questioned by a sometimes hostile defense attorney (Thomas & Zachritz: 93) (DiNitto: 86) (Speck & Aiken: 95) (Frank: 96). This often resulted in documentation of evidence that was rushed, inadequate, or incomplete (Frank: 96). Many physicians even refused to do the exam (DiNitto: 86). In one case it was reported that a rape victim was sent home from a hospital without having an evidentiary exam completed because no physician could be found to do the exam (Kettelson: 95).

As research became more readily available on the complex needs and appropriate follow-up of rape victims, nurses and other professionals realized the importance of providing the best ED care possible (Lenehan: 91). For 75% of these victims the initial ED contact was the only known contact they had with medical or professional support staff (Ledray: 92). Nurses were also very aware that while they were credited with only “assisting the physician with the exam,” in reality they were already doing everything except the pelvic exam (DiNitto: 86) (Ledray: 92). It was clear to these nurses that it was time to reevaluate the system and consider a new approach that would better meet the needs of sexual assault victims.

History of SANE Program Development

As a result of this identified goal to better meet the needs of this underserved population, the first Sexual Assault Nurse Examiner (SANE) programs were established in Memphis, TN in 1976 (Speck & Aiken: 95), Minneapolis, MN in 1977 (Ledray & Chaignot: 80) (Ledray: 93b), and Amarillo, TX in 1979 (AntognoliToland: 85). Unfortunately, these nurses worked in isolation until the late 1980s. In 1991, Gail Lenehan, editor of the *Journal of Emergency Nursing* (JEN) recognized the importance of this new role for nurses and published the first list of 20 SANE programs (ENA: 91).

In 1992, 72 individuals from 31 programs across the United States and Canada came together for the first time at a meeting hosted by the Sexual Assault Resource Service and the University of Minnesota School of Nursing in Minneapolis. It was at that meeting that the International Association of Forensic Nurses (IAFN) was formed (Ledray: 96b). Membership in IAFN surpassed the 1,000 mark in 1996 and continues to grow (Lynch: 96). In 2013, IAFN membership exceeded the 3, 000 mark. (www.iafn.org)

While the initial SANE development was slow, with only three programs operating by the end of the 1970s, development today is progressing much more rapidly. Ten new programs were established between 1980 and 1989, and 73 additional SANE programs established between 1990 and 1996. Eightysix SANE programs were identified and included in the October 1996 listing of SANE programs published in *JEN* (Ledray: 96b). In 2012 there are 708 SANE programs in the United States; approximately 90% are hospital-based and 10% are community based (verbal report from IAFN). Although recommended by ACEP patient management policies, a medical director is not a requirement for these nursing forensic programs. When utilized, program medical director may serve a valuable role assisting with standing orders and as a resource for patient care issues.

After years of effort on the part of SANEs, the American Nurses' Association (ANA) officially recognized Forensic Nursing as a new specialty of nursing in 1995 (Lynch: 96). Forensic nursing is the largest subspecialty of forensic nursing. At the 1996 IAFN meeting in Kansas City, Geri Marullo, Executive Director of ANA, predicted that within ten years the JCAHO would require every hospital to have a forensic nurse available (Marullo: 96).

Today, forensic nursing practice includes:

- Interpersonal Violence
 - Domestic Violence
 - Elder Abuse/Neglect
 - Child Abuse/Neglect
- Sexual Assault (Adult and Pediatric)
- Correctional Nursing
- Death Investigation
- Forensic Mental Health
- Legal Nurse Consulting
- Public Health and Safety
- Emergency/Trauma Services

Over the past several years, hospitals have transitioned their SANE programs into "Forensic Care Programs" which respond to the evidence collection and injury documentation of ALL victims of violence.

Summary

While the growth of the SANE concept was slow in the 1970s and 1980s, the undeniable value of the SANE resources for comprehensive quality care of the sexually assaulted patient has encouraged continued development of programs into present day. Both selective triage to specialized treatment centers as well as providing SANE resources for the rape victim are endorsed in ACEP policy. It is important that programs that are beginning today have access to the lessons learned by the programs that were developed more than twenty years ago. It is the purpose of this manual to make that information readily available in over the Internet

References

Unless otherwise noted, the references for this chapter can be found in the historic references appendix of this handbook.

Chapter 3

Minimum Core Content

Wendy Wooley, DO

At a minimum, health care professionals practicing in the area of sexual assault should receive instruction on the following topics, especially as they relate to specific local, legal, clinical, and follow-up issues:

- Multidisciplinary Team Concept
- Dynamics of Sexual Assault
 - Myths and realities
 - Rape Trauma Syndrome, Post-Traumatic Stress Disorder (PTSD)
- Sexual Assault Forensic Examination
 - Communication skills
 - History
 - Physical assessment
 - Detailed genital examination
 - Physical evidence collection
 - Forensic photography
 - Documentation
- Criminal Justice System
- Anatomy and physiology as it relates to sexual assault/abuse
 1. Normal male and female genital structures, from birth to reproductive age to the aged adult
 2. Effect of hormones on the genital structures
 3. Effects of the human sexual response cycle on the body
 4. Anatomic sequelae of nonconsensual sexual acts plus associated physical trauma
 5. Medical conditions, anomalies, or pathology that may influence the physical examination
- Psychological aspects of sexual assault
- Medicolegal forensic examination
 1. Patient assessment/patient history
 2. Evidence collection: physical examination/enhanced visualization/evidence collection kits/preservation of evidence
- The role of the forensic examiner in the criminal justice system
- Medical management of sexually transmitted diseases, HIV, and pregnancy
- Referral services available for the victim

Curriculum excerpts based on the "Sexual Assault Nurse Examiner Education Guidelines" of the International Association of Forensic Nurses. (Complete curriculum outline on adult and children available from the IAFN on request.)

Curriculum based on the "National Training Standards for Sexual Assault Medical Forensic Examiners" of the U.S. Department of Justice/Office for Violence Against Women, 2006. <http://www.safeta.org/associations/8563/files/training%20standards.pdf>.

Chapter 4

Special Issues In Sexual Assault

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Derek J. Schaller, MD

Evaluation of the sexual assault patient is a daunting task in itself. However, during the interview and examination of these patients, the astute provider must be wary of complicating circumstances that may require special attention. Among these are the issues of intimate partner violence, drug and alcohol-facilitated sexual assault, and human trafficking. Furthermore, certain unique populations may present additional challenges.

Throughout this process, one must also be careful to avoid emotionally distressing revictimization of the patient. Revictimization can occur easily in these individuals by requiring repeated retelling of events. Also, care must be taken to avoid any language that may be misconstrued as judgmental. In these vulnerable patients, this could cause victims to feel that they could have done something else to prevent the crime or that they are to blame for their own assault. Revictimization may lead to significant prolongation in the mental and emotional recovery of the patient.

Acquaintance Rape

Approximately 63% of sexual assaults are perpetrated by offenders known to the victim to some degree.⁵ These offenders may be acquaintances, or possibly even family members or intimate partners. It is estimated that 8–14% of women are sexually abused by an intimate partner during their lifetimes.¹ This estimate is probably even higher in the clinical population presenting to the emergency department. One must therefore operate with high clinical suspicion for intimate partner violence in order to identify this subset of patients suffering from sexual assault. It is estimated that 20% of victims of intimate partner violence have experienced sexual assault by their partners. These patients will require special attention to ensuring a safe home environment upon discharge. If any suspicion arises, it is imperative to separate the victim from accompanying parties in order to ask the necessary questions in a safe environment for the patient. Furthermore, any language barrier requires the use of a formal translator and the use of family or accompanying parties as translators should be avoided. Once identified, it is important to remember that victims of intimate partner violence are more likely to suffer nongenital injuries than those assaulted by a stranger.¹

Special Populations (also see Module—Special Populations)

Certain unique populations may be encountered while caring for victims of sexual assault. For example, sexual assault occurs frequently in the pediatric population. It is estimated that up to 40% of sexual assault victims may have experienced sexual assault as their first sexual encounter.⁴ Elderly patients also may be victims of sexual assault. Elder abuse is common, and approximately 1% of substantiated cases of elder abuse are cases of sexual assault.²

For any victim of sexual assault, the emotional and mental toll is high. Approximately one-third of these patients develop post-traumatic stress disorder, a rate six times higher than that of patients who have not suffered a sexual assault⁵. Furthermore, nearly 25% of patients presenting for sexual assault evaluation will have pre-existing mental health problems, the symptoms of which often worsen after this crime. Assault in these patients is associated with increased severity of both sexual and physical attack.⁴

Sex workers and erotic dancers are assaulted frequently as well. These assaults are motivated by power, control, and humiliation, just as in other cases. These patients must be taken seriously and their cases handled in the same manner as other sexual assault patients. Frequently, the assault may occur in the form of a transaction gone awry. Furthermore, these patients are those most likely to be victims of human trafficking.

Human trafficking is more common than many realize. It is defined by the U.S. Department of Homeland Security ICE Division as sex trafficking in which a commercial sex act is induced by force, fraud or coercion, or in which the person induced to perform such act has not attained 18 years of age. An alternative definition offered by ICE is the recruitment, harboring, transportation, provision or obtaining of a person for labor or services, through the use of force, fraud or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage or slavery.⁶ These patients may be quiet or even coached or spoken for by a controller and may be surprisingly young. Be wary of patients or accompanying persons requesting documentation of the absence of STIs. If trafficking is suspected, law enforcement should be notified immediately. Specific task forces are in place in the United States with hopes of ending human trafficking, and once notified, these officials may present themselves to the ED on short notice. They may be reached by notifying local law enforcement or by notifying the US Department of Homeland Security ICE division at 1-866-DHS-2-ICE or the FBI directly.

Drug-Facilitated Sexual Assault (DFSA)

Drug facilitated sexual assault (DFSA) may include the act of using drugs or alcohol to incapacitate a victim in order to commit nonconsensual sexual acts. In addition, perpetrators may take advantage of the vulnerability of a person who has voluntarily consumed alcohol or other drugs. Half of all sexual assaults involve drug or alcohol ingestion, with alcohol being the most common. Other substances implicated in DFSA include cocaine, benzodiazepines, prescription sleep aids, muscle relaxers, ketamine, ecstasy, and marijuana. Even over-the-counter medications have been used, including diphenhydramine (Benadryl), sleep aids, and tetrahydrozoline hydrochloride (Visine Eye drops). Commonly, more than one of these substances are identified. Although widely publicized, the covert use by a perpetrator of “date-rape drugs” like rohypnol and gamma-hydroxybutyrate (GHB) is identified in less than 3% to 5% of sexual assault cases.³ Despite the infrequent use of these drugs, certain history points should trigger suspicion of their utilization. These may include amnesia to events despite limited or no intake of mind-altering substances. DFSA is often reported late or not at all due to amnesia, uncertainty about whether a sexual assault actually occurred, and fear of repercussions if mind-altering substances were voluntarily consumed. First void urine specimens and expedient blood testing should be performed due to the short half-lives of these drugs in the body. Your local jurisdictional protocol for DFSA specimens should be followed. In addition, ask patients if any glassware containing the mind-altering substance is available for testing.

Drugs Used in DFSA	History/Signs/Symptoms to Suggest DFSA
Ethanol	Amnesia or memory impairment
Benzodiazepines (i.e., Valium®, Xanax® or Rohypnol®)	Nausea and vomiting
Antidepressants (i.e., Elavil® or Zoloft®)	Feel more intoxicated than expected
Muscle relaxants (i.e., Soma® or Flexeril®)	Slurred speech
Antihistamines (i.e., Benadryl®)	Profound hangover feeling
Over-the-counter sleep aids (i.e., Unisom®)	Loss of muscle control
Hallucinogens (i.e., Ecstasy, marijuana or ketamine)	Decreased inhibitions
Sedatives (i.e., GHB)	Dizziness
Opioids (i.e. Vicodin® or Oxycontin®)	Drowsiness
	Loss of consciousness

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Chapter 5

Working with Law Enforcement

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Physician’s Role

When working in conjunction with a trained SANE for the sexual assault survivor in the emergency department, a physician’s role may be to provide oversight. In addition to providing support and resources, a health care provider may be required by law to contact law enforcement to report the crime. This is dependent upon state law, and providers should be familiar with their own state mandates. As emergency medical professionals, physicians and nurses work more closely with law enforcement than peers in any other specialty. It is important to maintain professionalism and a good working relationship with these individuals. Understanding their role, requirements, and the legal process can facilitate just that.

In the matter of sexual assault, a crime has been committed or alleged. In most states, it is at the patient’s discretion whether to report sexual assault or to discuss the case with law enforcement. However, from a law enforcement standpoint, an investigation should be undertaken in the interest of removing a dangerous criminal from society. This may mean divulging protected health information (PHI) to non-health care personnel (See Module: Privacy and Confidentiality). HIPAA policies do provide for this, and are designed to continue to protect an individual’s privacy while allowing important law enforcement activities to continue. For a detailed understanding of these policies, original HIPAA documentation may be reviewed at the Department of Health and Human Services website located at <http://www.hhs.gov/ocr/privacy/hipaa/understanding/index.html>.

In summary, healthcare professionals may share PHI with law enforcement if a court order is produced, if an administrative request is made by law enforcement officials, or to respond to a request for PHI that may aid in identifying or locating a suspect. In the latter two cases, the scope of PHI divulged must be limited. Specifics regarding which types of information may be turned over are described in detail in HIPAA policies. Formal requests or court orders are not required if the victim or victim’s legal guardian agrees to the disclosure. The same provisions apply to the PHI of a suspect who has undergone forensic examination by medical providers.

In all cases, PHI shared should be kept to the minimum necessary for law enforcement officials to perform the duties required at that time. If uncertain about this, providers may rely upon law enforcement representatives to determine which information is necessary. Alternatively, the medical professional may ask for a court order, subpoena, or administrative request before sharing PHI if still uncertain or uncomfortable with the scope of information in question.

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Chapter 6

Privacy and Confidentiality

Ralph Riviello, MD, MS, FACEP

Confidentiality is important in the emergency department and is especially important in treating sexually assaulted patients. Privacy is legally defined as “the right to be left alone.” It is characterized by freedom from exposure to or intrusion by others. There are three usages of privacy:

- Physical Privacy
- Informational Privacy
- Decisional Privacy

Physical privacy is the freedom from contact with others or exposure to one’s body to others. Patients give their caregivers access to their bodies for medical examination and procedures, however they expect caregivers to protect them from unnecessary or embarrassing bodily contact or exposure. This is especially important in sexual assault victims.

Informational privacy describes the prevention of disclosure of personal information. Patients disclose a lot of personal information to their health care providers and they expect that access to it will be severely restricted. This form of privacy is most closely related to Confidentiality.

Decisional privacy is the ability to make and act on one’s personal choices without interference from others or the state. Decisional privacy is closely linked to the concept of respect for autonomy and the doctrine of informed consent. These principles are paramount in treating sexually assaulted patients.

Confidentiality as mentioned is closely related to informational privacy. Health care workers may breach confidentiality both intentionally and unintentionally. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) require physicians and health care institutions to adopt new procedures to protect patient privacy. In 2003, the regulations of HIPAA require providers “to protect the confidentiality, integrity, and availability to patients of *“individually identifiable personal health information” in any form, whether electronic, written, or oral. Personal health information includes information that relates to a person’s physical or mental health, the provision of healthcare, or the payment for health care.*”

HIPAA Exceptions

Under the HIPAA regulations, emergency physicians may use and disclose personal health information (PHI) without the patient’s written consent under certain circumstances:

1. PHI may be given to the patient himself or herself
2. Caregivers may use and disclose PHI for their own treatment, payment, and health care operations activities
3. With patient’s “informal permission” caregivers may disclose PHI to family members or in facility directories
4. Caregivers may use and disclose PHI for “12 national priority purposes.”

Twelve “National Priority Purposes” for HIPAA Disclosure without Permission	
1.	When required by law (statute, regulation, or court order)
2.	For public health activities (e.g., disease, vital statistics, and adverse events reporting)
3.	For reporting of abuse, neglect, or domestic violence
4.	For health oversight activities (e.g., audits or inspections)
5.	For judicial and administrative proceedings
6.	For law enforcement purposes (e.g., criminal investigations)
7.	For disclosures about deceased persons, to coroners, medical examiners, and funeral directors
8.	For organ, eye, and tissue donation purposes
9.	For some types of research (e.g., when an institutional review board has waived the authorization requirement)
10.	To avert a serious threat to the health or safety of a person or the public (e.g., from an escaped prisoner)
11.	For specialized government functions, such as military missions or correctional activities
12.	For Workmen’s Compensation claims

It is clear that under these national priority principles, several apply when caring for the sexually assaulted patients. It is always best to disclose to the patient the need for the health care worker to disclose information but realize, the patient’s written permission is not required.

Research and HIPAA

Research is an important task of the academic emergency physician. Many research questions exist around the care of the sexually assaulted patient and as a specialty we have an obligation to answer these questions. It is important to realize and remember that HIPAA applies to research as well. Emergency medicine researchers may use PHI with the patient’s expressed written consent or if they have obtained a waiver of authorization from an institutional review or privacy board after showing that the research could be conducted without the use of PHI. Personal identifiers must not be used or disclosed and researchers must assure in writing that the PHI will not be reused or disclosed. A written plan to destroy any identifiers after the research conclusion must be provided.

In addition, health care institutions may enter into agreements with researchers to disclose “limited data sets” exclusively for researchers. These data sets must not include the 16 identifiers listed:

- | | |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1. Names | 10. Certificate/license numbers |
| 2. Postal address information, other than town or city, state, and ZIP code | 11. Vehicle identifiers and serial numbers, including license plate numbers |
| 3. Telephone numbers | 12. Device identifiers and serial numbers |
| 4. Fax numbers | 13. Web universal resource locators |
| 5. Email addresses | 14. Internet protocol numbers |
| 6. Social security numbers | 15. Biometric identifiers (including finger and voice prints) |
| 7. Medical record numbers | 16. Full-face photographic images and any comparable images. |
| 8. Health plan beneficiary numbers | |
| 9. Account numbers | |

All research must be conducted following your facilities institutional review board policies.

Privacy and Law Enforcement Officers

Law enforcement officers play several roles in the ED. They may be called to provide protection physical protection to ED staff, patients, and visitors. Law enforcement officers may transport injured or ill patients from the scene of an accident or violent crime. And finally, they may come to the ED to collect physical evidence, interview crime victims or suspects, or otherwise pursue investigations of a crime.

These activities justify law enforcement having access to ED patients. If possible, ED patients should be asked for and give their permission to be visited by law enforcement officers and to have patient information released to law enforcement. Patients transported to the ED in the custody of law enforcement officers may have limited rights to physical privacy and confidentiality. Law enforcement activities should not interfere with patient care. Also, like other ED visitors, law enforcement officers should not be allowed to wander and view patient care activities not related to their purpose for being in the ED.

Privacy and Photography

Photography (and possibly videotaping) can be important parts of the evaluation of the sexual assault victim. Photodocumentation provides several advantages to and complements written documentation of injury. Photodocumentation is also an important tool in education of emergency medicine providers, including Sexual Assault Nurses/Forensic Examiners.

Several professional organizations have formulated policies about the filming of patients. These policies all emphasize the role of consent before filming or photographing. It is also good practice to obtain consent for subsequent use of the images (court/criminal proceedings or education/training). Check with your hospital’s risk management department concerning your institutions photography/filming policy.

Confidentiality and ACEP

ACEP has taken a strong stand on the need for privacy and confidentiality in the ED. Since 1994 ACEP has maintained a Clinical Policy on Confidentiality. The ACEP Board of Directors reaffirmed this policy in October 2008.

ACEP Clinical Policy: Confidentiality

The American College of Emergency Physicians believes that all physicians have an important ethical and legal duty to guard and respect the confidential nature of the personal information conveyed during the patient-physician encounter. Emergency physicians implicitly promise to preserve patient confidentiality, a promise that in turn promotes patients’ autonomy, privacy, and trust in their emergency physicians.

ACEP believes patient confidentiality is an important but not absolute principle. Confidential patient information may be disclosed when patients or their legal surrogates agree to disclosure, when mandated by law, or when there exist overriding and compelling grounds for disclosure, such as the prevention of substantial harm to identifiable other persons.

ACEP also acknowledges that there are circumstances in which no societal consensus exists about whether to disclose patient information. Specific problem areas include but are not limited to cases involving minors, drug testing, employee health, perpetrators and victims of violent crimes, medical records, the media, and communicable and sexually transmitted diseases. Such cases can require an extraordinary degree of sensitivity, discretion, and judgment on the part of emergency physicians.

Sample Confidentiality Statement

All information and evidence related to this investigation are privileged, confidential, and proprietary. The substance and content are exempt from disclosure to anyone, except its intended recipients, or as clearly compelled under applicable local, state, or federal law.

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Chapter 7

Injury in Sexual Assault

Monique Sellas, MD

A primary role of the forensic examiner is to identify and document injuries while remaining mindful that the absence of objective physical or genital injury does not preclude the possibility of sexual assault, including genitoanal penetration.

Physical Injury

Physical injuries in the sexual assault patient vary from the more common minor to the rare life-threatening. The trauma patient should be managed in accordance with ATLS trauma protocols while paying attention to preserving potential forensic evidence during the trauma evaluation.

The reported incidence of nongenital physical injuries ranges from 23–85% of patients based on published studies with varying methodologies.¹ The majority of these injuries are mild and self-limited, requiring only basic wound care. A smaller percentage (2–17%) suffer moderate injuries while only 1–2% of sexual assault patients suffer severe injuries requiring hospitalization.¹ When injuries are sustained, the most commonly seen are soft tissue injuries involving the head, face, neck, and extremities. Blunt force trauma, including a penetrative blunt mechanism, may produce contusions, associated with swelling, pain, tenderness, and discoloration, and lacerations from a tearing of the tissues. A friction mechanism may cause abrasions. Sharp force trauma may produce incised wounds. Bites may involve multiple mechanisms of injury. Patterned injuries suggest the specific object, weapon, or mechanism used to produce its characteristic shape.^{1,2}

The physical exam should be dictated by the history of the events. Close attention should be paid to the skin for signs of victim resistance, applied restraints, or defensive wounds. Patterned injuries should be documented. The oral cavity should be inspected for a torn lingual or labial frenulum or contusions to the palate with report of an oral assault. With a report of strangulation, the exam should focus on assessing for and documenting abrasions or contusions of the neck, dysphonia or dysphagia, facial petechiae, and subconjunctival hemorrhage.²

Nearly 20% of sexual assault victims require medical procedures or interventions.^{3,4} Such injuries should be treated and managed as per usual emergency care.

Genital Injury

The prevalence of genital injury following sexual assault varies greatly between different studies depending on the methodology used for the study, how injury is defined, on the experience of the examiner, and on the type of examination used.

From a research methodology perspective, the inclusion criteria can drastically affect estimates of injury. Some studies include sexual assault patients without penetration in their measurement of genital injury while others only include those with self-report of penetration and exclude assaults where penetration did not occur.^{5–12} Some studies include patients presenting within a specific time window after the assault, such as 48 or 72 hours, while others include those evaluated at much later times, some as late as 10 days out.^{5–12} One study examined the genitals of

volunteers within 48 hours of consensual intercourse and performed a follow up examination within 24 hours of the first and found that there were significantly larger total surface areas of injury, abrasions, and redness at the initial exam, thus time is a factor that would affect estimates of injury in studies of sexual assault.¹³ In support of this is a study that showed that anogenital injuries decreased by approximately 8% for every 24 hours after sexual assault, with a decrease in abrasions and lacerations decreasing from 71% at <24 hours to 28% at >96 hours.¹⁴

How injury is defined can also affect estimates of injury. Some studies define injury objectively, including the injuries of contusions, lacerations, and abrasions, while others also include the more subjective descriptions of erythema, swelling, and tenderness to define an injury, which may have poor interrater reliability and etiologies other than trauma-induced.^{5–12} One study showed that the examiner’s training and experience may influence the prevalence of genital trauma documented after sexual assault.¹⁵ Measurement techniques of injuries can also vary between studies. Studies using gross visualization only will vary in their estimates of injury when compared to those using a stoluidine blue, and those using colposcopy, which have been shown to have higher rates of injury detection and documentation.¹²

These issues notwithstanding, all of these studies give us a glimpse into the injury profile of sexual assault victims. Published rates of female genitoanal injury vary widely from 16%–80% depending on the above methodological factors.¹ Some studies have investigated risk factors for injuries and found that in those examined within 24 hours of assault, presence of nongenital injury, threats of violence, anal penetration, no prior sexual experience, and extremes of age have a higher incidence of genital injuries.^{6,8,9,11}

Any genital structure can be injured in sexual assault. The genital structures most frequently injured as a result of a penetrative mechanism vary by study but it is well established that the fossa navicularis and posterior fourchette are the most frequently injured, likely due to the underlying fixed perineal tendon. The labia minora and hymen follow suit. Damage to other vulvar structures is not uncommon, including the vestibule, periurethral area, labia majora, and perineum. Internal structures are injured much less frequently.¹ Foreign body penetration can cause significant injury and must be solicited in the history to guide the physical examination.¹⁶ The forensic examiner must be familiar with the pertinent anatomy to properly identify and document injuries.

A large number of sexual assault patients do not sustain obvious injuries. It is important that the emergency physician and forensic examiner understand that the absence of objective physical or genital injury does not preclude the possibility of sexual assault. Such injuries are dependent on many patient-specific and assault-specific factors such as the age of the victim, prior sexual experience, the state of the tissues such as lubrication and elasticity, degree of force involved, and use of objects or implements. In addition, the detection of subtle injuries is dependent on examiner training and experience.

Sexual Assault and Injury: Research Study Matrix

Study authors and date	Findings on physical/genital injury
Riggs N, Houry D, Long G, et al. 2000. ³	N=1076 SA patients aged 1–85, mean age 25, 96% female; 64% of female victims had physical trauma; 53% of female victims had genital trauma
White C, McLean I. 2006. ⁵	N=224 female adolescents with penetration; 32% of non-virgins had genital injury; 53% of virgins had genital injury; only objective injuries documented
Palmer CM, McNulty AM. 2004. ⁶	N=153 adult females, majority under age 30, examined within 72 hours; 46% had physical injury; 22% had genital injury; risk factors were presence of non-genital injury, threats of violence, and age >40
Biggs M, Stermac L, Divinsky M. 1998. ⁷	N=132 females age 15–64 with vaginal or anal penetration, 50% virgins, examined within 10 days; 65.2% of virgins and 25.8% of non-virgins had genital injury; no difference in overall mean # of injured sites or in the mean # of sites with nonpenetrating soft tissue injuries, lacerations, and bleeding; included some subjective injuries (swelling and redness)
Hilden M, Schei B, Sidenius K. 2005. ⁸	N=249 over the age of 12 with penetration examined within 72 hours; 32% had genital injury; anal penetration and assaults on women without prior sexual experience were associated with genitoanal injury; only objective injuries documented
Sugar NF, Fine DN, Eckert LO. 2004. ⁹	N=819 SA patients age 15 and over; 52% had physical injuries; 20% that consented to genital exam (N=759) had genitoanal trauma; injury was more frequent in victims <20 and >49, in virgins, those examined within 24 hours, and after anal assault; only objective injuries documented
McLean I, Roberts SA, White C, et al. 2011. ¹⁰	N=500 age 18 and over with vaginal penetration examined within 48 hours; 23% sustained genital injury; only objective injuries documented
Maguire W, Goodall E, Moore T. 2008. ¹¹	N=164 females, age 13–74, mean 24; 61% had body injury; 39% had genital injury, 20% had both, 18% had no injury; body injury was associated with time to exam and genital injury; genital injury was related to time to exam and reported virgin status; only objective injuries documented; colposcopy used on grossly visualized injuries
Slaughter L, Brown CRV, Crowley S, et al. 1997. ¹²	N=311 SA patients, age 11–85, mean 24; 68% had genital injury; included some subjective injuries (swelling, redness); colposcopy used for all patients

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Chapter 8

Documentation

Tiffany Bombard, BA, NREMT-P and Shellie Asher, MD, MS

Documentation of the assessment of the sexual assault victim by the sexual assault examiner should cover the usual History of Present Illness, Past Medical History, Physical Exam, Assessment and Plan components of a patient encounter. Descriptions of the assessment should be thorough and easy to interpret by both medically trained and non-medically trained persons, and as is good medical habit, all documentation by the sexual assault examiner should be completed in an unbiased manner.

Accounts of Victims or Witnesses

Gathering an account of the sexual assault (history of present illness) is standard medical practice and is of particular importance to the sexual assault examiner if the patient's condition prevents their interview by law enforcement. In these cases, if the patient dies or is incapacitated, the sexual assault examiner may be the only person able to testify to the patient's account of the assault. When possible, however, it is advantageous for the forensic examiner and law enforcement to simultaneously interview the patient regarding the events surrounding the assault. This practice is helpful not only because the police are a proper resource for documenting the patient's description of the crime but because police officers have continuous practice in conducting and documenting patient histories which are used in court.

Additionally, allowing the police officer to witness this portion of your interview helps to prevent the creation of two differing renditions of the patient's story (the sexual assault examiner's and the investigating police officer's). Presentation in court of two similar but not exactly matching accounts of the incident can erode the credibility of examiners and investigators as well as that of the victim and should be avoided if possible.

There are several components of the history of present illness that the sexual assault examiner should be sure to include in any interview. They are perhaps best recalled if one thinks chronologically about the event. If any information is gathered from someone other than the patient (for example a witness or family member) then the identity of the source should always accompany the information provided.

Past Medical History

- Has the patient had any past anogenital surgery?
- (If female) what is the patient's OB/GYN history (term pregnancies, premature births, abortions/miscarriages, live births)?
 - Is the patient pregnant?
 - When was her last menstrual period?
 - History of sexually transmitted infections?
- Is there history pertinent to whether the patient could give consent? For example, does the patient have a history of brain injury, mental retardation or dementia?
- What was the date and time of the patient's last consensual sexual encounter and what method(s) were used (for example, oral, anal, vaginal)?



History of the Present Illness

- Was there drug or alcohol use by the patient before, during, or after the assault?
- Where and when did the assault take place?
- Was there touching or penetration of any part of the patient's body with a penis, finger or any object?
- Was a condom used?
- Was there use of any kind of spermicidal foam or gel?
- Is the patient using any other form of birth control (IUD, oral, etc.)?
- Is the patient undergoing fertility treatment?
- Was the patient kissed, licked or bitten by the assailant, and if so where?
- Did the patient clean up in any way after the assault?
Specifically, did the patient:
 - void
 - insert or remove a tampon
 - change a sanitary pad
 - shower, bathe, douche, wipe
 - change clothes
 - brush their teeth, gargle, chew gum, smoke, eat, drink OR

- take medications before coming to the ED?

If so, when? Where are the original clothes, sanitary pads, or cleaning accessories?

- Who brought the patient to the ED?
 - What are the names and agencies of the EMS providers OR
 - The name and contact information of any stranger, friend or family member who accompanied the patient to the hospital?

The answers to the above questions are not only pertinent to an eventual legal case, but should also be used by the sexual assault examiner to help guide the physical examination and by the police department to help guide the crime investigation. The usual manner of a legal proceeding in court is to have the victim describe the event and identify the assailant if possible. With this said, the sexual assault examiner's account of the victim's statements is sometimes admissible in court, particularly when it was obtained in the standard practice of patient care, for example the victim's description of how an injury was sustained: "That bruise was from when I was hit with the butt of a gun."

Rarely, the examiner's recount of a victim's identification of a specific assailant "Jane hit me" is also admitted. Documentation of these statements by the sexual assault examiner should be word for word and enclosed by quotation marks. Again, if the patient is able to give this information directly to law enforcement as well, this is ideal.

Physical Examination

A regional system of documentation with headings such as: HEENT, NECK, CHEST, BACK, ABDOMEN, PELVIS, GENITAL, RECTAL and EXTREMITIES followed by LABORATORY VALUES, RADIOGRAPHIC STUDIES and PHOTOGRAPHS may be more useful than is a system-based description of the physical exam, as it often better documents trauma and is easily interpreted by persons without medical training. When using this system, there are also some general reminders that may also be of help.

- When documenting the genital examination, include the patient's Tanner stage (see the "Pediatric/Adolescent Patient" section of this handbook for a description of the Tanner stages).
- When describing the location of wounds, use nearby anatomic landmarks and, when pertinent, describe the wound shape. Examples of descriptions are: paired, directional, patterned (as from a clothes iron, belt, tool, teeth, car grille), or colored (ruborous, ecchymotic).
- When describing a contusion, a simple description of size, shape and location is best. Never judge the age of ecchymosis by its color.
- When describing gunshot wounds, include observations of muzzle imprints, abrasion collars, tattooing, abrasions and soot on the skin if they are found, however **DO NOT SPECULATE ON EXIT AND ENTRANCE WOUNDS** or on weapon caliber.
- A laceration is a skin tear from a blunt object. Cuts, incisions, stabs, slices and slashes come from sharp objects.
- Use the "Bite Mark Guidelines" section of this handbook to help with documentation of bite marks.
- Comparison to a clock face is a particularly good description method for perineal injury. Include patient position (e.g. "0.5 cm anal abrasion at 3:00 position with patient supine").
- To prevent discrepancies, always use a ruler or another known standard, such as a coin, to document size of wounds. Do not estimate.
- Include a ruler in all wound photographs, and make sure to take both detail (close up) and perspective (farther away) photographs to illustrate the location and extent of the injuries. Recheck the photographs before releasing the victim for admission/discharge to make sure that they are in focus and illustrate the injuries well. You only get one chance to get these right. Copy and save any photographs to an alternate device immediately to avoid accidental loss/deletion. (Please see the section of this guidebook titled "Medicolegal Photography in Sexual Assaults".) Consider having the patient return for additional photographs as additional injuries may appear.
- Correlation of the description of injuries or findings of moist secretions with representation on a body or genital map diagram is also very useful (please see the "Child/Adolescent" and "Adult/Adolescent Sexual Assault Forensic Medical Report" example sheets for guidance).
- Document the presence of colposcope photographs/video if a colposcope is used. (Please see the section of this guidebook titled "Use of Colposcope").

Diagnostic Studies

Should radiographs be used, comment should be made in your report regarding the location and size of bullets and/or foreign bodies, but *no* speculation should be given as to caliber.

Note which laboratory tests and toxicology screens were sent even though results might not be available at the time of your documentation.

Assessment and Plan

The assessment and plan is used to summarize the medical provider's findings and treatment plan. In cases with clear physical evidence, this can be an area to summarize injuries and other physical findings, and outline the plan for treatment including treatment for pregnancy and sexually transmitted infections including HIV. Do not be afraid to document a normal physical exam. In cases without clear physical evidence, a summary statement such as "history and exam consistent with sexual assault" can be helpful in clarifying that a normal physical exam does not preclude the possibility of sexual assault.

Summary

When documenting diagnosis, do not document “suspected,” “alleged,” or “rule-out” sexual assault. Even if the patient’s exam is normal, “sexual assault” is an appropriate diagnosis, in addition to other diagnoses as appropriate (physical assault, other injuries, etc.).

Remember not only to observe but to document observation of the Chain of Custody. Evidence including swabs and samples collected from the patient’s body and the patient’s clothing and personal items should never be left unattended and should be handed over to law enforcement as soon as possible. Document the description of each item gathered, the names of all persons who attended while the evidence was obtained, the date and time the evidence was handed over to law enforcement and the name, badge number and agency of the officer to whom it is handed. Recall as you create it that your written record will be scrutinized minutely by attorneys on both sides of the case. The physical exam portion in particular can also serve as a prompt to you during your testimony. To optimize its usefulness, you should create a document that is thorough, accurate and easily legible. Commentary must be held strictly to your actual findings. Personal opinions regarding the age or significance of the findings should *never* be expressed. Left/right errors must be avoided at all costs. Thorough proofreading and coordination of body map diagrams and injury descriptions with photographs of the injuries can help ensure accuracy.

Chapter 9

Adult/Adolescent Patient Sexual Assault Examination

Maura Dickinson, DO
Judith A. Linden, MD, FACEP

The sexual assault examination may be performed within 72–120 hours from a sexual assault on a patient who consents to this examination, depending upon local protocol. The victim does not have to report to the police to have an evidentiary examination performed. They then have the option to report at a later date; the evidence is held for an amount of time, depending on jurisdiction.

In addition to the medical aspects of care, the purpose of this examination is to collect observations, statements and evidence that can corroborate the patient’s report of sexual assault. The elements of rape include penetration of an orifice (mouth, anus or vagina), and lack of consent (either by use of, or threat of force, or incapacitation). The evidence collected by the medical examiner is considered very highly in court, because the provider is a trained observer, with little motivation to fabricate or falsify. The medical provider will not be asked to determine if a rape occurred, rather he or she is asked to record his/her observations and statements made by the patient.

The absence of injuries does not indicate absence of a sexual assault or rape.

The sexual assault examination kit is a legal document. Chain of custody must be maintained at all times. This means that once the kit is opened, it should not leave your sight, until you hand it off to the police or securely lock it up.

Patient Notification

Patients may be notified about the duty of medical personnel to report to law enforcement in cases of sexual assault (as dictated by local protocol). Patients should be informed that victims of crime are eligible to submit crime victim compensation claims and that Family Code sections address the ability of minors to consent to medical examination treatment and evidence collection related to sexual assault without parental consent, as dictated by state and local laws.

Patient Consent

Consent is crucial. It is as important to give the patient control during the exam as it is to perform the procedure correctly.

Consent for the following:

- Medical legal examination for evidence of sexual assault
- Toxicology testing if appropriate
- Collection of evidence including photographs
- Release of information to health authorities and qualified persons
- Consent for patient advocate to attend
- Other consent as dictated by local needs/requirements

Distribution of Forensic Medicolegal Report

Legible copies of the medical report should be made available to law enforcement, the forensic laboratory, and the medical facility, ensuring HIPAA compliance at all times (Module—Privacy and Confidentiality). The medicolegal record should be maintained separately from the patient’s other medical records to ensure limited access.

The following section describes the elements of the forensic medical report, section by section. Please see the Appendices for examples of forensic medical records.

Chapter 10

Adult/Adolescent Sexual Assault Forensic Medical Report

Judith Linden, MD and Maura Dickinson, DO

Adapted from the Forensic Medical Report Suspected Acute Adult/Adolescent Sexual Assault; State of California, Office of Criminal Justice Planning; OCJP 923

Patient Demographic Information

Name of patient	Age
Patient ID number	Date of birth
Address	Gender
City	Ethnicity
County	Race
State	Date/time of arrival
Telephone number	Date/time of examination
Date/time of discharge	Presence of interpreter? If so, name? Language?

Law Enforcement Information

- Name of officer who took the report
- Responding officer
- Agency
- ID number
- Telephone number

Patient History

Name of person providing history (document relationship to patient)
 Document if an interpreter is used, including interpreter name and language
 Pertinent medical history
 Last normal menstrual period (document any recent anogenital injuries, operations, diagnostic procedures, or medical treatment that may affect physical findings)
 Other pertinent medical condition(s)
 Preexisting physical injuries
 Pertinent history related to the encounter
 History of other consensual intercourse within the past 72–120 hours (as per local protocol). Document time course in detail, such as when did ejaculation occur and whether a condom was used
 Drug and alcohol use before the assault?
 Drug and alcohol use after the assault?
 Post-assault hygiene activity: Document whether the patient did any of the following after the encounter:

Urinated	Gargled/brushed teeth
Defecated	Smoked
Vomited	Ate or drank
Douched	Chewed gum
Removed/inserted tampon/diaphragm	Changed clothing
Wiped/cleaned genital area	Took medications
Bathed/showered	

Assault History

Document patient's description of the encounter in direct quotes if at all possible:

- Date of assault(s)
- Time of assault(s)
- Physical surrounding of assault(s)
- Assailant information: If more than one assailant, identify by number
- Lapse of consciousness
 - Anterograde amnesia
- Nongenital injury, pain, and/or bleeding
- Anogenital injury, pain, and/or bleeding
- Force or coercion used
- Weapons: threatened or used
- Verbal coercion, or threat(s)—(Fear of injury experienced by patient)
- Physical assault
- Grabbing/holding/pinching
- Physical restraints
- Drugs used to facilitate sexual assault; clandestine drugging of patient
- Strangulation
- Burns
- Ingestion of a substance (including voluntary alcohol or suspected drugs)
- Injuries inflicted on assailant(s) during assault (describe)

Document the following acts as described by the patient and whether a penis, finger, or other object was used (NOTE: ANY PENETRATION – HOWEVER SLIGHT – CONSTITUTES THE ACT):

- Penetration of labia majora (vulva or deeper structures)
- Penetration of anus or deeper structures
- Oral contact with genitals
- Oral contact with anus
- Nongenital acts
 - Biting of patient or by patient on perpetrator
 - Licking
 - Oral contact (e.g. kissing)
- Other acts

Did ejaculation occur? If yes, note location:

- | | |
|----------------------------|---------|
| Vulva or deeper structures | Bedding |
| Anus or deeper structures | Mouth |
| Body surface | Other |
| Clothing | |

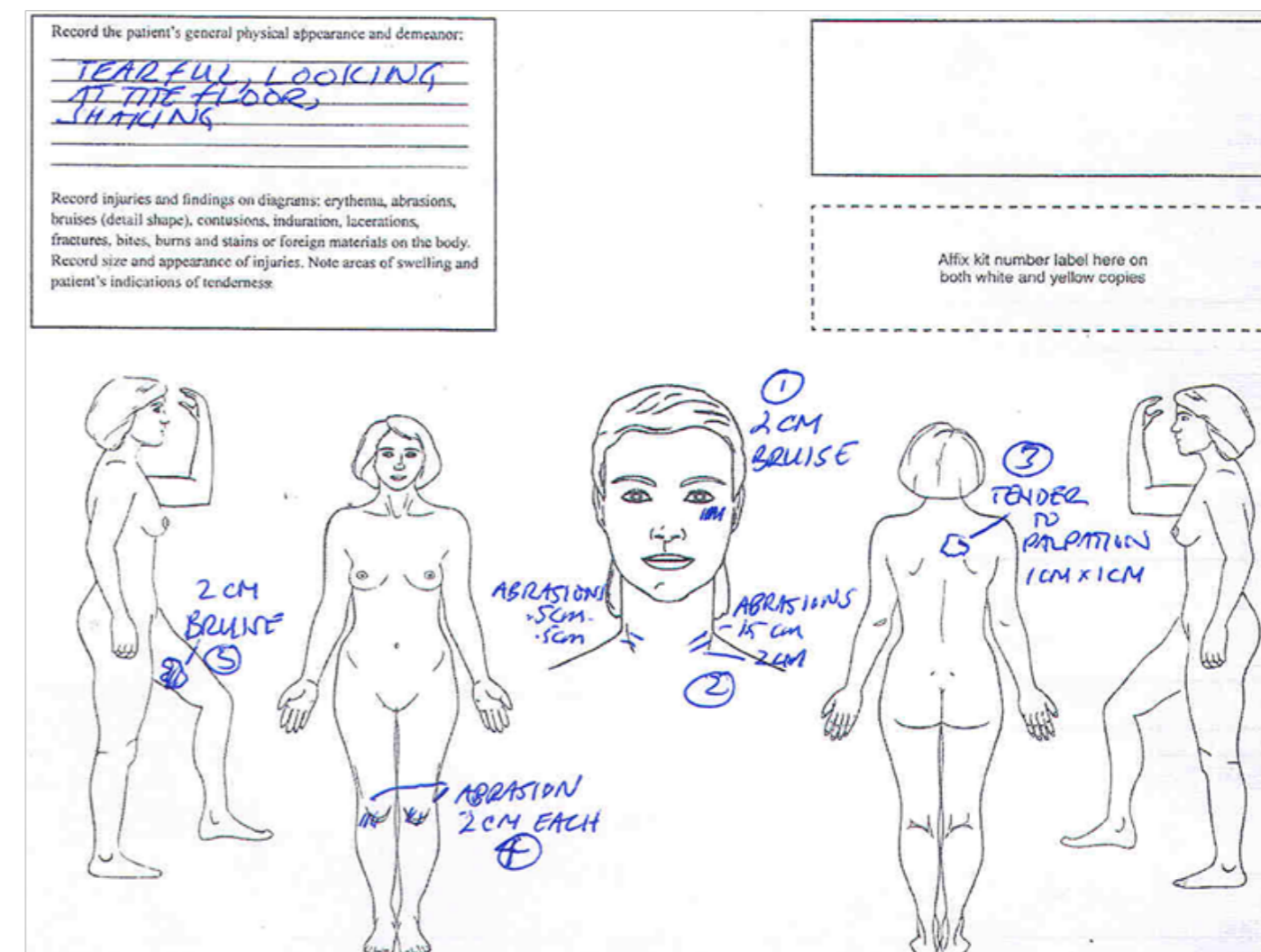
Contraceptives or lubricant products used

Document use of foam, jelly, lubricant, and/or condom, and the brand, if known

General Physical Examination and Findings

- Vital signs
- Date and time of examination
- General physical appearance
- General demeanor/behavior/orientation—(describe the behavior, rather than label (i.e.: tearful, shaking, rather than scared or sad))
- Description of clothing on arrival
- Conduct physical examination and document, draw, number injuries/findings, including size and appearance, on a diagram (example, Figure 5) and use a legend for abbreviations or numbers (be specific)

Figure 5: Examination Drawing



- Collect reference samples per local protocol using sterile water (Module—Adult/Adolescent Patient)
- Alternative light source examination
- Collect dry and moist secretions, stains, and foreign materials from body, including head, hair, scalp
- Examine the oral cavity for injury
- Collect dried/moist secretions, stains, and foreign materials from lips, perioral region, nares
- Collect fingernail scrapings or cuttings according to local policy
- Gently swab the areas the suspect kissed, licked, or sucked (to limit patient's skin cell DNA collected)

Genital Examination—Female

Perform an external examination and document findings (Figures 6 and 7) of the external genitalia and perineal area specifically for injury, foreign materials, and other findings in the following areas (use hours of the clock to describe location if necessary):

- Buttock
- Thighs
- Perineum
- Labia majora
- Labia minora
- Clitoral hood and surrounding area
- Periurethral tissue/urethral meatus
- Perihymenal tissue (vestibule)
- Hymen
- Fossa navicularis
- Posterior fourchette

Follow procedure noted in the sexual assault kit or evidence collection kit

Examine the vagina and cervix for injury, foreign materials, and foreign bodies. Use colposcope or other magnification, if available (Module—Special Forensic Examination Techniques). (Figure 8)

Examine the buttocks, perianal skin, and anal folds for injury, foreign materials, and other findings. Consider anoscopy if rectal injury is suspected.

Figure 6

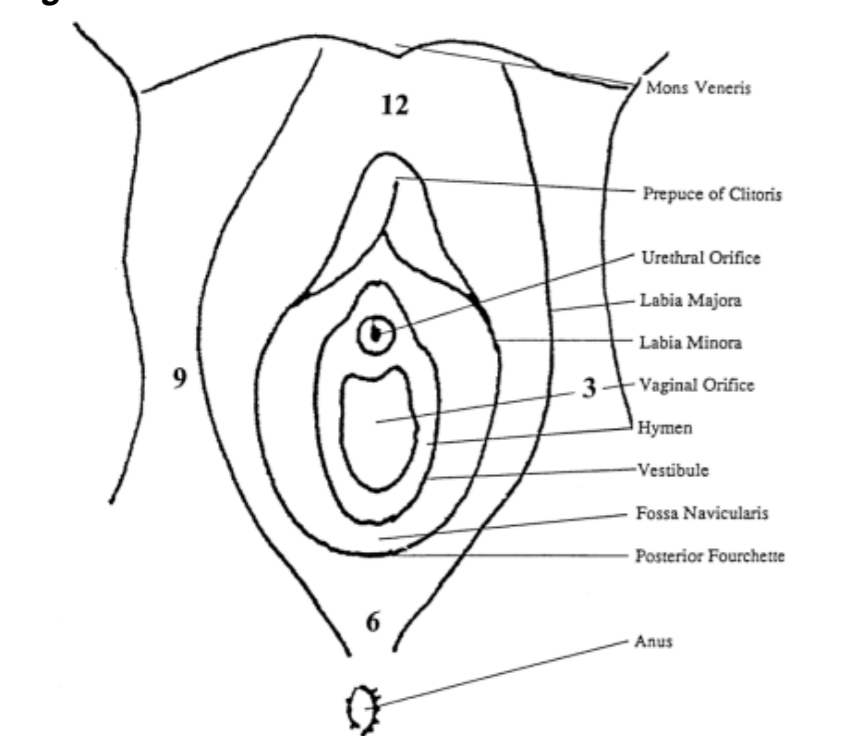
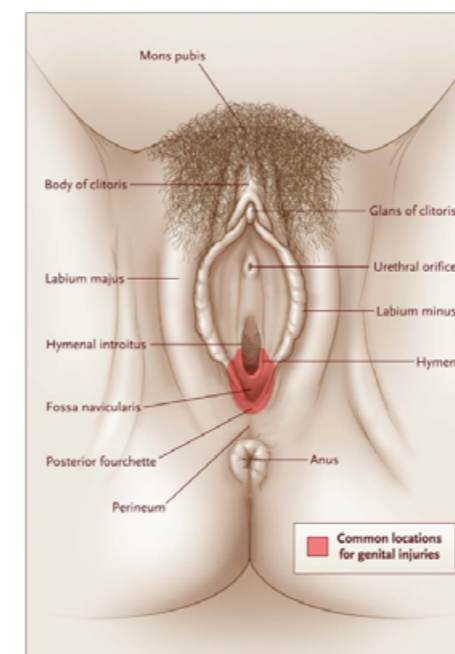
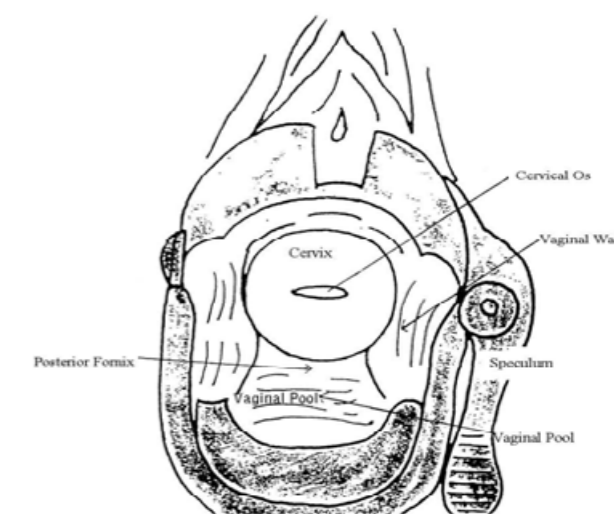


Figure 7



“From [NEJM, Linden JA, Care of the Patient After Sexual Assault, 365:834–41, Copyright © 2011, Massachusetts Medical Society. Reprinted with permission

Figure 8



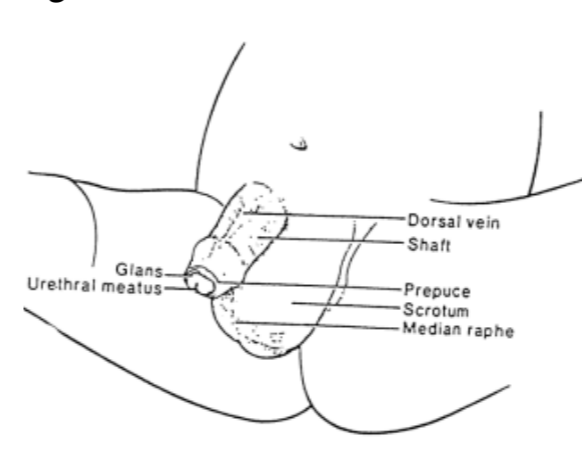
Genital Examination—Male

Examine the external genitalia and perineal area (Figure 9) for injury, foreign materials, and other Findings. Include the following body areas:

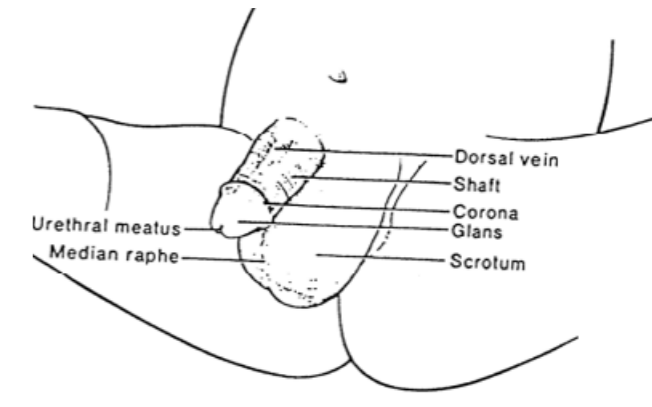
- Buttocks
- Thighs
- Foreskin
- Urethral meatus
- Shaft
- Scrotum
- Perineum
- Glans
- Testes

Document whether the patient is circumcised

Figure 9: Uncircumcised



Circumcised



PEARLS

Adolescent/Adult Sexual Assault Examination

1. Consent is crucial. If there is a question about whether the patient is able to give consent (i.e. if the patient is unconscious), consult your hospital administration for local protocol (Module—Special Populations).
2. Explain every step to the patient before you perform that step.
3. Use gloves when obtaining specimens to avoid contamination of specimens and change gloves between specimen collections to avoid cross-contamination.
4. Use sterile or distilled water to moisten swabs when necessary (NOT saline).
5. Open cotton swab sleeves from the non-cotton tip side. Return to sleeve or specially enclosed box, after dry.
6. Use the alternative light source to help identify areas that may contain assailant DNA.
7. When collecting a sample from a moist area, use dry swabs. When collecting a sample from a dry area, moisten swabs.
8. Air dry all specimens. If you cannot completely dry an item (ie: a tampon) note this on the front of the kit.
9. DO NOT LICK ENVELOPES to close. Close envelopes with kit labels, or a moistened gauze.
10. THE PATIENT HAS THE RIGHT TO DECLINE ANY PART OF THE EXAMINATION.

Document Specimens Submitted to the Forensic Laboratory

Document all materials sent to the forensic laboratory, including the following:

Clothing

Foreign materials on the body

Blood	Dried secretions
Fiber/loose hairs	Vegetation
Soil/debris	Swabs of suspected semen
Body cavity samples	Oral sample
Swabs of suspected saliva	
Swabs of areas highlighted by alternative light source (using the most up-to-date technology)	

Vaginal/anal/perianal/perineal sample

Fingernail scrapings/cuttings

Pubic hair combing/brushing

Matted hair cuttings

Intravaginal foreign body

Intrarectal foreign body

Reference samples

Buccal swabs/blood (to identify patients DNA—either buccal swab or blood sample, according to local protocol)

Toxicology samples, if indicated: blood and/or urine

Photodocumentation (Module—Forensic Photography)

Document use of toluidine blue (Module—Special Examination Tools and Techniques)

Document all examination methods used

Personnel Involved in Sexual Assault Evaluation

Document all personnel involved in taking the history, performing and present during the physical examination, and handling specimens.

Overall Clinical Assessment

Please note that history of sexual assault with no physical findings may still be consistent with the sexual assault. Avoid legal terms such as “rape” or “abuse.” Also avoid the term “victim.” It is preferable to use the word “patient.”

Law Enforcement Information

Document the name, ID number, and agency of the officer to whom the kit is given. Also document the time and the date that the kit is transferred. Include a comprehensive list of the evidence collected. If the kit cannot be immediately picked up, it should be locked in a secure refrigerator.

At the conclusion of the examination, if appropriate, brief law enforcement on findings, interpretation, and assessment. Anything found during the examination, such as foreign fibers like dirt, carpet, and so on, should be discussed.

Patient Discharge

Health care personnel have specific tasks to accomplish before patient discharge, as do advocates, and law enforcement (if involved). Responders should coordinate discharge and follow-up activities as much as possible to reduce repetition and to avoid overwhelming patients.

Chapter 11

Male Patient Sexual Assault Examination

Phillip Peterson, MD, and Ralph Riviello, MD, MS, FACEP

Introduction

While the overall evaluation and management of the male sexual assault victim parallels closely that of the female victim, male victims constitute a unique population warranting further, detailed discussion.

Epidemiology

The epidemiology of the sexual assault of men follows from two rather disparate sources: emergency department case studies and criminological databases, which often lead to dissimilar conclusions but from which much can be inferred. In all, about 3% of men will experience sexual assault in their lifetimes, resulting in about 110,000 men being victimized each year.¹

Male victims tend to be overwhelmingly young,^{2,3} with the majority of victims being 19 years of age or younger and the incidence of sexual assault dropping with advancing age. The incidence ranges from 23.2 visits per 100,000 for ages 0–9 to 7.9 per 100,000 for ages 10–19 and 2.5 per 100,000 for ages 20–34, or 5.5 per 100,000 overall [3]. Whereas men accounted for the majority of assailants in cases in which forcible penetration occurred, the majority of rapes were perpetrated by women.²

Case studies from emergency departments have, however, tended to differ from studies of criminological databases. In criminologically-based studies,^{2,4} the majority of victims reported no injury; and only one-third of cases involved forcible sodomy, while one-half involved forcible fondling. Additionally, less than one-third sought help after the assault, and 12 percent reported the assault to the police.⁴ In ED case reports of victims presenting for evaluation and management,⁵ victims tended to be older, with a mean age in their late 20s; were more likely to report forcible penetration, with 52% reporting forcible anal penetration, 15% forcible oral penetration, and 33% reporting both; were more likely to report physical trauma; and were less likely to know their attacker or attackers.

While one may be tempted to treat inmates as a special population in which the characteristics of sexual assault would be assumed different from that of the community, it is found that incarcerated male victims are similar to their community cohorts with the exception that they tend to be younger.⁶

It may thus be inferred that male victims, like female victims, are reluctant to report their assaults or present for medical evaluation; but when they do present, they are more likely to have suffered traumatic injury and forcible penetration.

History

As with any patient presenting to the emergency department, initial history and evaluation are intended to rapidly identify and stabilize any life-threatening or emergent conditions. Following this, the history is similar to that of female victims and should include any identifying information:

- the date and time of the assault and the exam;
- the use of physical force, weapons, or foreign bodies;
- any drug or alcohol use;
- the specifics of the rape, including anal and oral penetration, sucking, licking, and fondling;
- the last bath, shower, or other hygienic practices after the assault;
- last urination, defecation, and clothing change;
- and the victim's last instance of voluntary sexual intercourse and areas of penetration.⁷

The date and time of the assault are very important, as they may influence evidence collection.¹ The examiner should be familiar with the requirements of his or her jurisdiction.

The examiner should also obtain and document in meticulous detail the victim's narrative of the assault and note the victim's allergies, tetanus and hepatitis B statuses, and other recent injuries or procedures that may alter the appearance of genitalia.¹ It is also important to ask the victim about any injuries inflicted upon the assailant which may influence evidence collection (e.g., fingernail scrapings after scratching the assailant). Additionally, as stated above, many assailants are known to the victim; in such a scenario, information regarding assailant's health status such as the assailant's hepatitis B status, HIV status, and risk factors for HIV may be obtained and documented in order to support medical decisions and treatment plan.

Physical Examination and Injury Detection

As discussed above, begin with attention to the ABCs of the potential trauma victim before proceeding with evidence collection and injury documentation. Attention should also be given the emotional state of the victim, and the exam should be preceded by a complete explanation of the procedures and examinations to follow. As with any patient, informed consent should be obtained for the forensic rape examination.

The patient should be completely disrobed and placed in a hospital gown in order to fully assess for injuries. The patient's clothing should be collected as evidence and placed in an appropriate container, which is typically a paper bag. The examiner should remember to have only the patient handle his or her clothing in order to minimize contamination.⁷ A complete inspection of the fully disrobed patient should then follow with consideration given to the details of the assault. Search for and meticulously document foreign bodies, fingernail scrapings, dried semen stains, abrasions, lacerations, contusions, incisions, suction injuries, and bites. Consider the use of photography if permitted or required by the jurisdiction in which the crime will be prosecuted. Swabs of bite and suction marks and semen stains are obtained as per usual protocol, and consider obtaining oropharyngeal and anorectal swabs for gonorrhea and chlamydia if indicated.

Signs of trauma in the oropharyngeal examination may include laceration of the labial or lingual frenulum, mucosal abrasions, and contusions. Additionally, posterior pharyngeal wall and soft palate petechiae may develop days after the assault, and it should be noted that spermatozoa have been found in the oropharynx as many as 12 hours after the assault despite brushing or oral intake.¹

The history of the patient will advise the areas that should be closely inspected. This MAY include genitals, inner thighs, and perineum, but would include any areas where the patient reported being grabbed/contacted or other body parts where the assailant may have ejaculated. If dried semen is present on the patient's pubic hair, a clipping of the patient's hair may be obtained. Penile swabs should also be obtained the glans, shaft, corona, and base of the penis, as they may contain dried secretions or saliva.¹ Additionally, swabs should be taken of the anterior scrotum around the base of the penis, as they can be a potentially rich source of DNA evidence in cases of oral copulation of the victim by the assailant. As an alternative to swabs, a moistened gauze pad can be used to swab the penis and the scrotum. The examiner should consult with his or her crime lab for procedures on the proper acquisition and handling of such evidence.

Next, the anorectal region must be inspected for gross injury, including tears, abrasions, bleeding, erythema, hematoma, discoloration, fissures, foreign bodies, engorgement, and friability. Swabs should be obtained by inserting them approximately 2 cm into the rectum and gently moving in a circular motion. Some authors suggest that anoscopy and colposcopy are not routine but should be strongly considered in cases in which there is attempted or successful anal penetration or in which the patient had a lapse of consciousness.¹ It has been found, however, that anoscopy and colposcopy identify additional findings in both patients with and without findings on gross examination,⁸ with anoscopy identifying additional findings in one third of patients whose gross examinations were positive and findings in about 10% of patients whose gross examinations were normal.⁸ Alternate Light Source examination examination may be of limited value, as it has been found positive in only one-third of patients.⁸ As such, consider the patient's narrative of events and gross findings when considering the utility of anoscopy and colposcopy.

Significant pain and inability to tolerate the exam may warrant admission for surgical consultation and exam under anesthesia. There are also the extreme cases in which significant injuries are present, including large and expanding rectal hematomas and perforation, which will necessitate emergent surgical consultation and admission.

Disposition

Disposition is based upon the standard of care for the injuries that are identified during the examination. Per the 2010 CDC guidelines⁹ of the treatment of sexually transmitted diseases, trichomoniasis, gonorrhea, and chlamydia are relatively common and should be treated empirically. The recommended regimens are as follows:

- Gonorrhea: ceftriaxone 250 mg IM once;
- Trichomonas: metronidazole 2 gm PO once; and
- Chlamydia: azithromycin 1 gm PO once or doxycycline 100 mg PO BID for one week.

Hepatitis B immunity should be assessed; and, in those who did not receive immunization against the hepatitis B virus or in those who are incompletely immunized, the HBV vaccine should be administered within 24 hours and again at 1- and 6-months post-exposure. Hepatitis B immunoglobulin should be administered within 72 hours in the nonimmune patient after a high risk exposure to a known HBV-positive assailant or when local data on infection dictate.

In considering non-occupational postexposure prophylaxis (nPEP) for HIV, it is important to regard the characteristics of the assault that may increase the risk. It is known that risk is increased with multiple assailants and decreased by about 80% with condom use [10]. Additionally, in the scenario of intimate violence, the abusive partner is more likely to have multiple other sexual contacts, thereby increasing risk.¹⁰ Risk is also thought to be increased in forcible penetration secondary to increased trauma to underlying tissues.¹ The risk of HIV transmission also varies with the acts performed and is estimated to be highest in unprotected anal intercourse at 0.1–3%, followed by contaminated IV needle use at 0.67%, then occupational needle-stick at 0.4%, and unprotected vaginal intercourse at 0.1–0.2%.⁵ Transmission during oral sex involving intact mucosa is rare but thought to be possible.

One must also consider that it is estimated the cost of one month of prophylactic antiretrovirals costs \$600–\$1200, compared to \$223,000 to treat AIDS.¹⁰ Thus the consideration to initiate nPEP should involve careful review of the details of the assault itself, physical exam findings that may suggest increased risk of transmission, local epidemiological data on HIV infection, and the time elapsed since the assault. The patient must also be made aware of the unproven benefit, known toxicities, and the need for compliance and close follow-up.

Often institutions have a standardized medication protocol for nPEP. If this is not the case, consultation with an infectious diseases specialist, the CDC website, or the National HIV/AIDS Clinicians' Consultation Center (1-888-448-4911 or <http://www.nccc.ucsf.edu>) is warranted.

If nPEP is initiated, it should be started with 72 hours of the exposure, and the patient should be re-evaluated in 3–7 days and again at 6 weeks, 3 months, and 6 months with an infectious diseases specialist to undergo repeat testing for HIV. Close follow-up is also necessary if the HBV vaccine series is initiated.

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Chapter 12

Pediatric/Adolescent Patient Sexual Assault Examination

Dale P. Woolridge, MD, PhD

Normal Physical or Congenital Findings that Can Be Confused with Child Sexual Abuse

Hymen note: All females have a hymen. Stating "no hymen present" is incorrect per Reece¹ and Pillai.²

Hymenal Shapes

- Imperforate hymen (classically appears as blue-domed mass at puberty)
- Annular (most common morphology at birth—80% in the study by Berenson of 468 neonates)^{3,4}
- Of note in the study by Berenson, anterior clefts in the hymen were common in normal patients but **NO** posterior clefts were noted. This supports the tenet that posterior clefts are caused by trauma.
- Crescentic (most common morphology in preadolescents)
- Fimbriated (19% in the study by Berenson)
- Septate
- Cribriform

Hymen Variants

- Tags
- Clefts
- Notches
- Septal remnants

Vagina

- Distal vaginal atresia
- Vaginal septum (associated with other urogenital abnormalities)
- Vaginal ridges
- Rugae
- Ambiguous genitalia
- Urethral prolapse

Other

- Periurethral Bands
- Labial Adhesions
- Midline fusion defects

Physical Findings in Child Sexual Abuse

Likelihood of finding physical evidence of abuse depends on the following factors:

- Use of force
- The size and age differences of the perpetrator and the patient
- Whether a foreign object was placed/forced into the mouth, vulva, or anus
- Positioning of the child and use of lubricants during the abuse
- Type of abuse and its frequency and chronicity (McCann found that in children with genital injury from sexual assault, healing occurred rapidly and little scar formation resulted; irregular hymenal edges and narrow rims at the point of injury were the most persistent findings⁷)
- Whether the child resisted

Conditions and Injuries that Can Be Confused with Child Sexual Abuse

Anogenital erythema, excoriation, pruritus

- Fecal contamination, retained urine, restrictive clothing (tights), chemical irritants (bubble bath soaps)
- Atopic dermatitis, lichen sclerosis, scabies, nonspecific vaginitis, pinworms, perianal streptococcal cellulitis, inflammatory bowel disease, Kawasaki syndrome

Anogenital bruising

- Straddle injuries (bicycle crossbar, balance beam, or jungle gym): hymenal membrane should not be traumatized, but presence of bruising to labia majora or periurethral area is common; motor vehicle accidents, impaling injury
 - traumatized lichen sclerosis, phytodermatitis, bleeding disorders, vascular nevi, Mongolian spots

Anogenital bleeding and vaginal bleeding or discharge

- Foreign bodies to vaginal area: toilet paper or facial tissue may be irritant and cause vaginal discharge
- Atopic or seborrheic dermatitis
- Precocious puberty, hormone-producing tumors, vaginal polyps, vulvar hemangioma, sarcoma botryoides

Nonbloody vaginal discharge

- Leukorrhea, vulvovaginitis, varicella, measles, scarlet fever, typhoid
- Congenital abnormalities of genitourinary tract (ectopic ureter), rectovaginal fistula, prolapsed urethra

Other

- Phimosis/paraphimosis, hair tourniquet syndrome, hematocolpos, mucocolpos

Physical Examination Findings Consistent with Child Sexual Abuse

(occur in approximately 25% of cases)

Findings consistent with abuse **but not diagnostic** include the following:²⁻⁵

Female patient

Note: The size of the hymenal opening is based on relaxation, position, technique used, and anatomic structure and thus is not useful information to be included in medical documentation.

- Vaginal discharge; urethral inflammation; lymph gland inflammation; pregnancy; recurrent atypical abdominal pain; blood stains on underwear; genital bleeding; genital pruritis; genital bruising
- Abrasions, chafing or bruising to medial thighs
- Bite marks to the thighs, breasts, or other areas
- Scarring, tears or distortion to the hymen
- Injury to or scarring of the fossa navicularis or posterior fourchette
- Scars or tearing of the labia minora

Note: Nonintentional trauma (straddle injury or falls) often results in injury to anterior structures such as the periurethral area or labia minora or majora; the hymen is rarely affected. Intentional trauma usually results in injury to posterior structures such as the hymen, posterior fourchette, fossa navicularis, and anus.

Male patients

- Abrasions or bruising to the genital region, anus, or back
- Penile discharge, painful urination, penile swelling
- Bite marks to the genital region, anus, or back

Male and female patients

- Bruises, scars, or anal tears
- Other anal findings include: the loss of rugal pattern to anus, loss of sphincter tone, scars, persistent or immediate anal dilatation (without stool present), edema, venous congestion, skin tags, or contusions to natal cleft or perianal tissues
 - *Note:* Anal dilation can be normal if the patient voluntarily relaxes the sphincter muscle during the exam. Spontaneous dilation or immediate dilation is considered abnormal.⁶
- Tears to the labial frenulum or palatal petechiae
- STDs, enuresis, encopresis

Note: Sixty-six percent of patients with a history of anal penetration have normal exams,⁸ and reflexive dilatation is controversial because it can be found in 49% of children without abuse.⁹

A NORMAL PHYSICAL EXAMINATION is most often what is found and can be consistent with abuse!

Guidelines for Interviewing Children

The medical interview has become a critical component of the diagnostic, therapeutic, and legal aspects of child sexual abuse. Although interviewers must adapt to the individual and variable needs of children, care must be taken to prevent undermining the child’s credibility by improper questioning. In many communities, the role of the specialized or forensic interviewer has been established by multidisciplinary, interagency agreements. This may mean the child will be referred to another agency, a children’s advocacy center, or a medical facility. When specialized procedures have been developed, the medical interview may serve as a major component of the forensic interview coordinated with law enforcement and child protection. In specialized medical settings, children can feel safe and comfortable with intimate discussions. The child can provide very specific details regarding what happened to his or her body through responses to a series of questions that are carefully constructed so the question does not contain the answer. Some or all of the following questions can be used to meet the individual needs of the child.¹⁰

Unless performed by a trained forensic interviewer, “minimal interview” techniques should be utilized in order to avoid inconsistent patient histories and leading questions that distort disclosure.

Event	Example Questions
Obtain information from caretaker/social worker/law enforcement separate from child.	Include past medical, developmental and behavioral history. Ask about exposure to violence, drugs, and pornography.
Interview child alone in a safe environment that is comfortable for the child. Establish rapport with the child. Determine child’s verbal and cognitive abilities, level of comfort, and attention. Establish rules: If I ask questions you don’t know, “I don’t know” is an OK answer. If I make a mistake or misunderstand you please correct me. If you need a break, please ask.	What’s your name? How old are you? Where do you live? Who else lives with you? Do you have any pets? Names? What grade are you in? What do you like best about school?
Ask about daily living and intimate relationships.	Where do you sleep? Where do mommy/daddy sleep? Who gives you a bath?
Determine if child knows the difference between truth and lies and remind the child to tell the truth.	If I told you that this rabbit was an elephant, what would that be? (truth or lie) Let’s only talk about things that are true, that really happened.
Ask the child to identify body parts, including names for genitalia and anus (use a diagram). Use child’s name for the body part. Ask about different types of touch; include kisses, hugs, tickles, spankings, and pinches or bites.	Identify hair, eyes, nose, mouth, belly button, breasts, and private parts. Who gives you kisses? Hugs? Spankings? Etc.? Show me where kisses go? Hugs? Spankings? How do hugs make you feel? Kisses? Spankings?
Try to determine what happened. Begin with open-ended questions. Use more focused questions for younger or reluctant children.	Do you know why you came to see me today? Did something happen to you? A focused question is, “Have you had a touch on your bottom (use child’s name for body part) that hurt or bothered you?” Can you tell me about that?
If child begins to disclose, ask easier questions first. Work up gradually to the harder details. Ask younger child to show you what happened. (use dolls or diagrams to aid demonstration, if specially trained) Avoid questions that contain the answer. Avoid questions that can be answered yes or no.	Where were you when that happened? Where was Mommy? Daddy? Was anyone else there? Who did it? What did he/she do? How did it make you feel? How did it make your “peepee” feel? Did he/she say anything? Did you tell anyone? Whom? What did he/she say when you told?
Elicit the details of the abuse from the child. Use the diagram to ask about all possible abusive touches and ask about any other times (places) it happened. Descriptors of odor, texture, sensations are extremely valuable in substantiating the event	Ask the child specifically about the penis. Who has one? What is it for? What did it look like? What did you see/feel it do? Where did it go? Anything come out of it? What? Where did it go? Who cleaned it up?

Event	Example Questions
For the older child or adolescent, questions can be more specific. Last consensual sexual content if within the last five days.	Obtain date and time of assault. Oral, breast, rectal, or genital contact or penetration. Ask about ejaculation and bathing, brushing teeth, urinating, defecating, douching, changing clothes since assault, and saving clothes or bedding. Obtain menstrual history and whether patient is sexually active and/or uses contraceptives. Were any lubricants or a condom used?
Conclude the interview.	Tell the child he/she did a good job and that it was good that he/she told so we can help. Assure them that they are not in trouble.
Document; we prefer videotape to capture the child's expression and demonstrations.	Document questions asked and answers given. Try to record exact words, phrases, and emotional reactions.
Explain the examination. Ask the child during the examination to show you what they told you happened. If there was no disclosure, ask if anyone has hurt or touched the genital or anal parts being examined. Reinforce the doctor/patient relationship by clearly stating your role as the treating physician and not as an advocate of law enforcement or prosecution	Now I'm going to do a checkup. Listen to your heart and lungs and feel your tummy and to look at your private parts to make sure they are OK. Conclude by reassuring child that his/her body is OK.

Sexual Abuse Forensic Medical Report

Adapted from Forensic Medical Report: Suspected Child/Adolescent Sexual Abuse, State of California, Office of Criminal Justice Planning – OCJP 925

Patient Demographic Information

Name of patient	Age
Patient ID number	Date of birth
Address	Gender
City	Ethnicity
County	Race
State	Date/time of arrival
Telephone number	Date/time of examination
	Date/time of discharge
Mother	Presence of interpreter?
Father	If yes, Name _____
Stepmother	Language _____
Stepfather	
Guardian	

Reporting and Authorization

- Telephone report made to:
 - Name, agency ID number (if applicable), and telephone number of law enforcement and/or child protective services
- Responding personnel to medical facility:
 - Name, agency ID number (if applicable), and telephone number of law enforcement and/or child protective services
- Authorization for examination from requesting law enforcement agency, if required:
 - Name, ID number, and agency of law enforcement officer

Consent For Examination By Patient/Parent/Guardian (Module—Your State/Local Laws)

Parental consent may not be required in some states; check your state family code

History of Encounter (Module—Pediatric/Adolescent Patient)

- Provide the time frame
- Document if there were multiple incidents over time
- Describe the incident using patient's own words; identify historian as child or other adult accompanying child, (please put statement in direct quotes as applicable)
- For acts described by other historians:
 - Provide name of historian, relationship to patient, and telephone number
 - Provide a detailed history of encounter (denote whether a penis, finger, or other object was used)
 - Describe perpetrator (name of perpetrator, identifying features, tattoos, moles, birthmarks, number of assailants, ethnicity of assailant)
 - Vulvar penetration/contact
 - Anal penetration/contact
 - Oral penetration/contact to genitals (not object or finger)
 - Oral copulation of genitals
 - Oral copulation of anus
 - Anal/genital fondling
 - Did ejaculation occur (if so, where?)
 - Was lubricant or jelly used?
 - Was a condom used?
 - Did you bite? Were you bitten?
 - Fondling, kissing, licking, biting, suction injuries?
 - Was force or threat(s) used? (Describe)
 - Were pictures or videotapes taken or shown?
 - Please describe other acts not otherwise listed

- Elaborate on patient's description of symptoms of pain or bleeding
- Describe demeanor of patient or emotional response while taking the history
- Clothing worn during the event, state of clothing (wet, soiled, stains)
- Ask about post-assault hygiene activity; document if the patient:

Urinated	Gargled/brushed teeth
Defecated	Smoked
Vomited	Ate/drank
Douched	Chewed gum
Removed/inserted tampon	Changed clothes
Bathed/showered	Took medication
Wiped/cleaned genital area	

Medical History Pertinent to the Encounter

- Document from whom the history was taken
- Relate pertinent prior surgeries, diagnostic procedures, medical treatment and anogenital injuries
- Provide history of other physical or sexual abuse incident(s)
- Provide history of recent or current medication(s) and contraceptives
- Describe other sexual activities by adolescent only (provide details of the activity)
- Menstruation
 - Age of menarche and date of last menstrual period
- Symptoms disclosed by patient

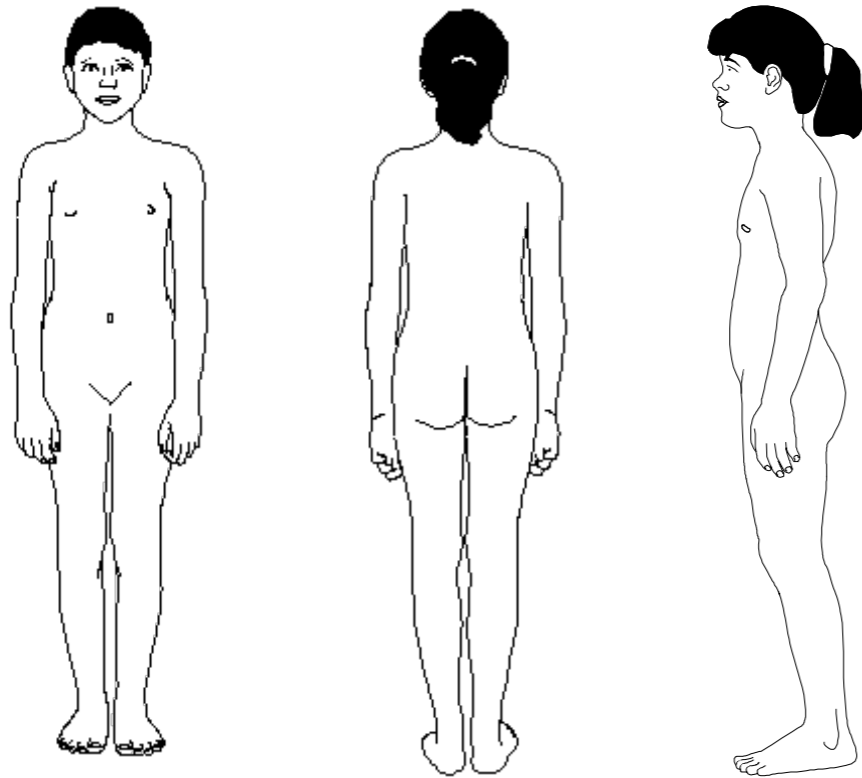
Abdominal pelvic pain	Pain on urination
Genital discomfort or pain	Genital itching
Rectal discomfort or pain	Rectal itching
Rectal bleeding	Constipation

General Physical Examination

- Vital signs, height, weight, Tanner Stage
- Demeanor/behavior of child during examination
- Record any statements by patient during the examination pertinent to the encounter
- Document physical findings by photography

Document and draw the number of injuries/findings on Figure 1 and use legends to describe physical findings. Please provide a legend if abbreviations or numbers are used. Use Figure 1 to document injuries to back, face, buttock, arms, and so on.

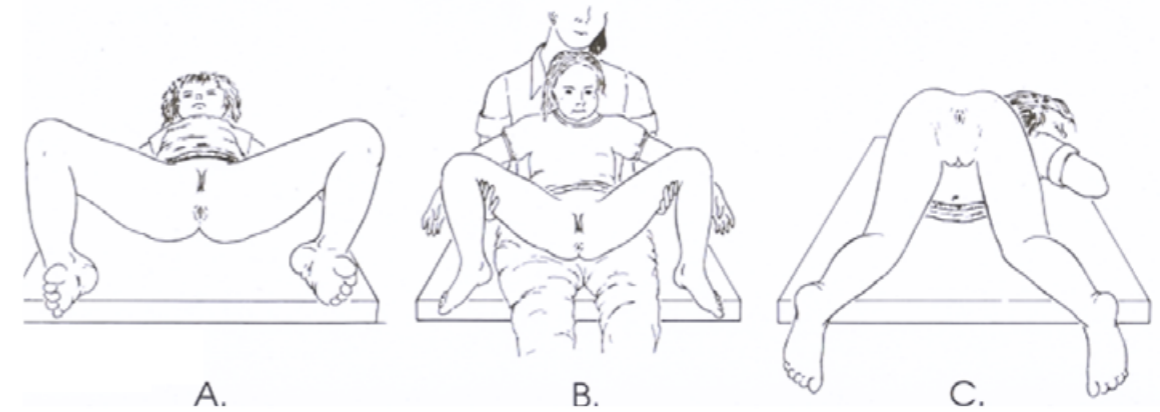
Figure 1



Physical Examination

- Anogenital findings
 - Use legend to describe anogenital/perineal injuries.
 - Document position the child was in during the physical examination (Figure 2).
- A. Dorsal recumbent position
- B. Frog-leg position with guardian assistance
- C. Knee-chest position

Figure 2

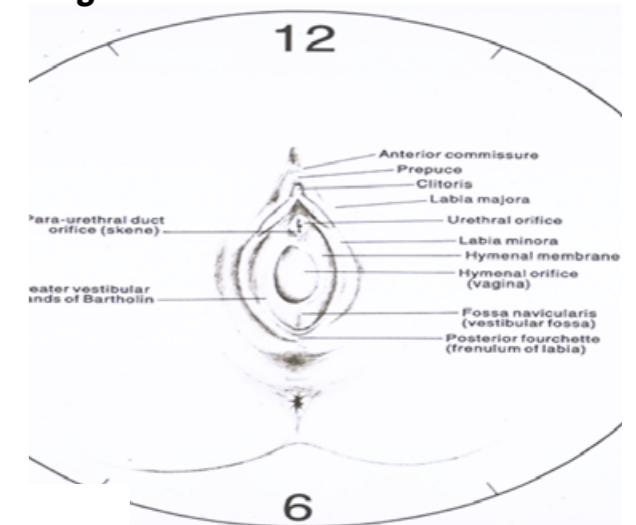


Anogenital Documentation

- Examination methods
 - Direct visualization
 - Colposcope (Module—Use of Colposcope); camera
 - Other magnification techniques
- General
- Female genital examination
 - Document examination position and methods (Figure 2)
 - Document examination and describe if separation and traction were used
 - Document if toluidine blue was used (Module—Special Examination Tools and Techniques)
 - Document description of the following structures (Figure 3)

1. Clitoris
2. Labia majora
3. Clitoral hood
4. Labia minora
5. Fossa navicularis
6. Posterior fourchette
7. Periurethral/meatus
8. Hymen
9. Vagina

Figure 3

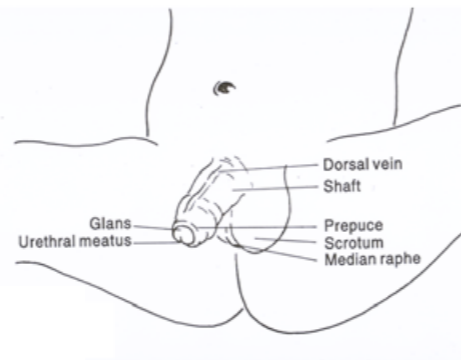


Male genital findings

Document all findings to the following (Figure 4)

1. Penis (Is patient circumcised?)
2. Urethral meatus (Is a discharge present?)
3. Glans
4. Shaft
5. Scrotum/testis

Figure 4



Female/male anus

Document all findings

- Examination position (supine, knee-chest position, lateral recumbent)
- Examination methods (define: traction, etc.)
- Use of toluidine blue
- Buttocks
- Perianal skin
- Anal folds
- Anal dilatation (note if persistent or immediate; record actual time to dilation)
- Document if stool is present in the ampulla; it may be helpful to have the patient defecate and reexamine the patient

It is possible that further invasive procedures may be required such as anoscopy, vaginoscopy or a speculum examination under anesthesia if it is suspected that injuries to deeper structures are present.

Summary of Findings

It is important to note that the absence of injury is a common finding in cases of sexual abuse. It is important that your conclusions summarize and integrate the physical findings in light of the history of sexual abuse, and a normal genital examination can neither confirm nor negate sexual abuse incidents. In cases with obvious physical findings, one can state that the examination is consistent with the history of sexual abuse.

Medical Laboratory Tests Ordered

NOTE: Ideally, cultures should be deferred until after biological evidence is collected. If possible, actual cultures should be taken whenever available as this is still considered the ‘gold standard’ in legal proceedings. Medical advancements in nucleic acid amplification assays have led to an increased use of screening and even a replacement of culture using this technology. Gonorrhea or chlamydial detection through nucleic acid amplification confers a higher degree of sensitivity although less specificity. The lack of specificity is compensated for by corroboration with culture results or repeat amplification testing.

Document all laboratory tests ordered as indicated

Document when the following laboratory tests were obtained (if applicable):

- Gonorrhea culture (document source of culture: oral, cervical, vaginal, anal, penile)[NOTE: GC culture remains the gold standard although NAAT testing is done frequently for screening purposes]
- Chlamydial culture (document source of sample as above)
- Wet mount
- Serology
 - Syphilis
 - HIV
 - Hepatitis
- Pregnancy test (document whether blood or urine test was sent)

Photodocumentation

Document the use of colposcope, still photographs, or video for attainment of photodocumentation of findings. Specify the body area of the pictures taken.

Examination Performed by Personnel

Document the names of persons completing the examination, license number (if applicable), signature, credentials, and telephone number.

Evidence Submitted to The Forensic Laboratory

Document all evidence sent to the forensic laboratory (Module—Adult/Adolescent Patient)
Strict documentation of chain of custody accounting for all personnel in possession of evidence
Document the following:

- Clothing
- Foreign body on material, including:
 - Blood
 - Dried secretion
 - Fiber/loose hairs
 - Vegetation soil/debris

- Swab for suspected semen
- Swab for suspected saliva
- Swabs from areas denoted positive by alternative light source (alternate light source)
- Control swabs (reference samples) of area adjacent to alternative light source
- Fingernail scrapings
- Matted hair cuttings
- Pubic hair combing/brushing
- Feminine hygiene products

Document oral/genital samples sent from the following regions:

- Oral
- Vaginal
- Vulvar
- Vestibule
- Cervical
- Anal
- Penile

Document attainment of reference samples

Distribution of Evidence

Identify the agency, name of individual accepting the following evidence, and date and time

- Clothing
- Sexual assault kit (evidence kit)
- Reference blood sample or buccal swab
- Toxicology samples
- Urine sample, if not officially part of the sexual assault kit

Signature of Officer Receiving Evidence

- Signature of officer
- Name
- Agency ID number

Document Distribution of Forensic Medicolegal Report

Copies of medical report should be available for law enforcement, the forensic laboratory, the child protective agency, and medical facility records. The medicolegal record should be maintained separately from the patient’s other medical records to ensure limited access.

Discharge Information

Minor discharged under the care of (name)
Telephone number

Developmental Staging

Tanner Staging

Documentation of sexual development (Tanner Stages) is important because a young, preadolescent girl or boy may physically mature by the time of the trial.

Pubic Hair

- Stage 1: Preadolescent. No pubic hair or hair in pubic region is fine, like that over other areas of the body
- Stage 2: Appearance of few, long, lightly pigmented hairs. Straight or curled hair develops at the base of the penis or along the labia
- Stage 3: Hair increases in density, becomes coarse and curled, and darkens
- Stage 4: Hair of adult color and texture but covering a smaller area, with no spread to the medial thighs
- Stage 5: Adult-like pattern

Breast Development

- Stage 1: Preadolescent
- Stage 2: Breast bud stage
- Stage 3: Further enlargement and elevation of breast areola
- Stage 4: Projection of areola and papilla to form secondary mound above the level of the breast
- Stage 5: Adult stage, projection of papilla only, areola even with breast

Male Genitalia

- Stage 1: Preadolescent
- Stage 2: Enlargement of scrotum and testes, without enlargement of penis; scrotum reddens and changes texture
- Stage 3: Continued enlargement of scrotum and testes, now with lengthening of penis
- Stage 4: Increase in size of penis and glans
- Stage 5: Adult stage

Huffman Sexual Maturity Rating

Chronologic age does not accurately reflect the developmental changes seen in the female external genitalia. Most of these developmental changes are directly influenced by the response to various levels of estrogen found in the female at different times of her childhood and adolescence. Because many cases of sexual assault are not heard in court for years after their alleged occurrence, it is important to document this information at the time of presentation. The court should be advised of any likely significant developmental changes that may have occurred since the actual assault. This information should be given in the form of Tanner and, if necessary, Huffman Staging changes so as to be consistent and reproducible from one professional to another.

1. Stage 1
 - 1.1. Occurs after birth for the first couple of months of life. Due to maternal estrogen effects.
 - 1.2. Hymen typically appears
 - 1.2.1. Thick
 - 1.2.2. Pink in color
 - 1.2.3. Moist in appearance
 - 1.2.4. Actual secretions may be present. It is not unusual for a small amount of blood to be noted as the maternal estrogen dissipates

2. Stage 2
 - 2.1. This is a period of low estrogen effect.
 - 2.2. It typically occurs from about 2 months to about 6 or 7 years of age. Hymen typically appears
 - 2.2.1. Thin
 - 2.2.2. Translucent or whitish in color
 - 2.2.3. Minimal secretions present
 - 2.2.4. Hymen typically appears dry
3. Stage 3
 - 3.1. This is the period during which the body begins producing more estrogen. Usually, Tanner Staging will give indications of estrogen effect at this time as well.
 - 3.2. Typically, this stage occurs between the ages of 7 and 12.
 - 3.3. Hymen appears
 - 3.3.1. Increasingly pinkish in color
 - 3.3.2. Thicker
 - 3.3.3. Somewhat lubricated
4. Stage 4
 - 4.1. This is the premenarcheal stage.
 - 4.2. Genitalia become much more adult like in appearance.
 - 4.3. Hymen appears
 - 4.3.1. Lubricated
 - 4.3.2. Thick
 - 4.3.3. Pink in color
 - 4.3.4. Tanner Staging typically demonstrates clear evidence of endogenous estrogen production

Clinical Evaluation Summary

Clinical Evaluation	Child	Adolescent	Adult
Sexual assault kit <72 hours ¹	± ¹	+ ¹	+
Sexual assault kit (72–120) ²	–	±	±
Cultures—recent (<72 hours) ²	–	–	–
Cultures—chronic ³	+	+	+
Use of colposcope (Use of Colposcope)	±	±	±
Use of alternative light source	±	±	±
Antibiotic prophylaxis for STDs ⁴	–	+	+
HIV prophylaxis ⁵	±	±	±
Hepatitis B vaccine: patient immunized ⁶	–	–	–
Hepatitis B vaccine: patient not immunized ⁷	+	+	+
Tetanus: patient immunized >5 years or underimmunized	<7 years old—DaPT	³8 years old—DT	Td

¹Selective completion of the sexual assault kit in the child may be most appropriate. This would allow the health care professional to complete those parts of the sexual assault kit that are pertinent to the history and clinical findings of the patient. This management strategy is most applicable to the pediatric patient who is often frightened by the examination and may suffer emotional trauma as a result. The sexual assault kit should be completed in cases of sexual assault occurring within 72–120hours (state specific). After 72–120 hours, new technology, such as DNA, may identify the perpetrator in cases in which evidence is present in the vagina for 3 weeks or more and on clothing for years; therefore, in selected cases, the kit may be completed after 72 hours

²Initial STD testing is a controversial issue. In most instances, the results of the culture will be negative, and if positive, they may or may not indicate new infection. Because these specimens are not forensically indicated, one management strategy is that no culture be taken acutely unless obvious signs of STDs are present. For chronic sexual abuse cases, obtain cultures because chronic infection may be asymptomatic.

³After 3 to 7 days, it may be helpful to take cultures that might indicate an infection that was introduced at the time of the sexual assault. Cultures should be taken if there is a high prevalence of STD and for patients for whom there is physical evidence of infection with a STD.

⁴Patients in whom there has been vaginal or anal penetration with or without ejaculation or oral penetration with ejaculation should be considered for antibiotic prophylaxis. In preadolescent patients, antibiotic therapy can be withheld until follow up evaluation at an abuse center where treatment can be based on test results. Antibiotics should not be held for any symptomatic patient or if follow up evaluation cannot be assured. For nonchronic sexual abuse in the asymptomatic prepubescent child, two options exist: 1) to provide prophylaxis based on the history as above or in the presence of another STD; and 2) do not provide prophylaxis but schedule the child for a 2-week return visit, when cultures would be taken for children based on the history (as above or at high risk for STDs in the community or perpetrator) and if symptomatic. All patients should be given instructions to return immediately if symptoms develop.

⁵HIV prophylaxis is not universally accepted as a standard of practice but may be considered in selected cases. The risks and benefits of the medication regimen must be considered. HIV prophylaxis may be given in cases in which there has been anal or vaginal penetration or oral penetration with ejaculation. In addition, other information can be used to evaluate the risk of HIV transmission to patient, such as history of repeated events in a single abuse episode, multiple perpetrators, perpetrator known to be HIV positive, and high prevalence of HIV in the area in which the sexual assault occurred.

⁶If patient is surface antibody negative, then proceed with hepatitis B vaccination. If the patient has not received the complete hepatitis B vaccine series, complete the series.

⁷Provide hepatitis B vaccine at time zero and at 1 and 6 months.

Behavioral Indications of Child Sexual Abuse

Clinical Presentation

The patient may present with a behavioral complaint or a physical complaint. Signs and symptoms of sexual abuse can range from subtle (nightmares) to obvious (vaginal discharge). A partial list of signs and symptoms of sexual abuse is outlined in the following table:

Indications of Child Sexual Abuse

Behavioral	Physical
Aggressive behavior	Abdominal pain
Clinging behavior	Anorexia
Insomnia	Constipation
Excessive Masturbation*	Painful defecation
Sudden change in behavior	Pregnancy
Phobias; fears	Rectal bleeding
Sexualization of play*	Sexually transmitted infection
Attempted suicide	Vaginal itching, discharge, or bleeding
Regression of toileting skills	Urethral discharge or bleeding
Enuresis/Encopresis	

*Possibly indicative of sexual abuse

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Chapter 13

Special Examination Tools and Techniques

Chamé Blackburn, MD and Lindsay Stokes, MD

Several tools and techniques can aid in the identification of injuries and evidence in sexual assault patients. This chapter will cover the use of special procedures including colposcopy, anoscopy, toluidine staining, alternative light source use, and the foley catheter technique as adjuncts to the physical exam.

Colposcopy

The colposcope (from the Greek *kolpos* “womb, vagina” + *skopos* “to look at”) provides the examiner a magnified view of the external anogenital tissues, vagina and cervix to greatly enhance the detection of injuries that might be missed with the unaided eye. While significantly improving detection of genital microtrauma, the interpretation of these injuries may be controversial as consensual intercourse can also cause microinjuries. Colposcope magnification varies between devices, ranging between 4x and 30x. Most colposcopes have photographic or video recording capabilities that can further enhance documentation. Use of photographic or video equipment in the examination reduces the likelihood of the patient having to submit to a reexamination and improves overall documentation and quality review. To begin the colposcopic exam, the adult patient should remain in the lithotomy position, and the child patient should be placed in either a frog-legged or knee-to-chest position. Inspection of the labia and external genitalia should be performed first at a low magnification (usually 5x) and increased to obtain a more detailed view of areas of interest. Application of warm water to adherent mucosal surfaces with a moistened fingertip or cotton swab can aid in separation and examination of the entire hymen. Examining in several positions (especially in children) can increase the chance of not only finding true injury but reduce the chance of erroneously identifying variations in anatomy as injury.

After evaluation of the exterior anatomy, insertion of a speculum is necessary for colposcopic examination of the interior vaginal walls and cervix of adults and adolescents. Again, the colposcope should be returned to the lowest magnification, and increased to fully inspect the cervix and interior vaginal walls.

Anoscopy

An anoscope can be used not only to check for internal anal injury but also for evidence collection. If the patient reports bleeding or rectal pain, the anoscope may be used to medically evaluate the patient for injuries. In addition, positive evidence swabs taken from the anal mucosa above the tip of the anoscope clearly indicate that the swabs were not contaminated with vaginal evidence that has “pooled” in the perianal area. Unfortunately, anoscopy after assault can also be painful and poorly tolerated by the patient.

To perform anoscopy, place the patient in a comfortable position such as on their side. Knee-chest and lithotomy positions may also be used. Gently insert a lubricated, lighted, anoscope into the anal canal having the patient breathe slowly and concentrate on relaxing the anal sphincter. Remove the obturator and immediately inspect the anal canal for injury before swabs are inserted. Anorectal evidence is most likely to be found within 24 hours of the assault and semen tends to collect at the anal mucocutaneous junction. Swabs should be moistened lightly with water prior to insertion for the patient’s comfort.

Foley Catheter Technique

In postpubescent girls with estrogenized hymens, a foley catheter can be used to see hymenal tears or injuries that are difficult to view because of redundant tissue. This technique involves placing the catheter in the vaginal vault and inflating the balloon with air (water is too heavy and will make the catheter fall out). The examiner then gently pulls the balloon forward against the hymen to allow the tissues to rest along the balloon surface to check for injuries. The balloon is then deflated and the catheter removed. The balloon catheter can also be included in an envelope in the evidence kit.

Toluidine Blue Staining

Toluidine blue dye binds to nucleated squamous cells in the deeper layers of epidermis and when properly applied will only stain areas acute injuries or areas that have been recently abraded of the top epithelial layer. Use of toluidine blue dye increases the sensitivity of injury detection in the forensic exam, and can assist in illuminating injuries for photography and view by non-medical personnel.

If both the anal and vaginal areas are to be examined, the dye should first be applied to the anal area to prevent cross-contamination. The dye should be applied with a cotton swab and excess dye can be removed by blotting the area with sterile gauze moistened with either a 1% acetic acid solution or lubricating jelly. Commercial, single use swabs are available which allow easy application and prevent cross-contamination. The dye should only be applied to epithelialized skin (labia, perineum, anal folds) and not to mucosal surfaces such as the hymen or vaginal wall. Once the excess dye is removed, raw or abraded tissue will stain blue, while intact epithelium will be easily wiped clean. Care should be taken to remove all excess as residual dye (such as can be found in skin crevices) may be misinterpreted as a traumatic injury.

It should be noted that inflammatory or infectious lesions will also retain the dye, and care should be taken in differentiating traumatic versus non-traumatic lesions. The latter is often the case with diffuse and widespread uptake of dye.

The patient should be informed that they may shed traces of dye into their clothes for a few days after the exam.

Alternate Light Source

When the patient does not remember what happened, or is otherwise unable to give a detailed history such as a child, an alternate light source (ALS) such as a Bluemaxx light can be helpful to identify areas of potential deposited secretions. The ALS emits ultraviolet light under which some oily fluids such as semen and urine will fluoresce in a blue to orange color. It should be noted that not all body fluids will fluoresce under the light and not all that fluoresces will be body fluids (lotions, soap, lint, fungal infections etc. can also light up). However, the highlighted areas allow the examiner to identify areas to further investigate and obtain evidence swabs. There is evidence to indicate that semen fluoresces best under lights with wavelengths of 450–500nm.

The patient should be examined in a darkened room and the light source should be held near the body about 4–5 inches away. Areas that fluoresce should be documented either photographically or identified on a pictogram. They should also be sampled with moistened cotton swabs and carefully labeled so that the location and possible fluid type is recorded. In addition, the patient's clothing can be examined under the light to identify stains that may contain biological evidence.

Recent literature has shown the use of alternate light source for injury detection in the skin and soft tissue structures especially in strangulation cases.

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Chapter 14

Prophylaxis Care after Sexual Assault

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Adult/Adolescents

In patients who have been sexually assaulted, there are a number of pathogens that must be considered which may result in sexually transmitted infections. Trichomoniasis, bacterial vaginosis, chlamydia, and gonorrhea are the most frequently diagnosed infections among women who have been sexually assaulted. The presence of a sexually transmitted infection (STI) after an assault does not necessarily imply acquisition during the assault.

As adherence to follow up visits is traditionally low, any adult/adolescent patient who presents for sexual assault including genital, anal or oral assault with or without ejaculation should be offered prophylaxis in the emergency department for (STIs) including gonorrhea, chlamydia and trichomoniasis. Of note, gonorrhea prophylaxis may also provide coverage for syphilis. Prophylaxis is NOT recommended without testing in children.

According to the 2010 Centers for Disease Control (CDC) Sexually Transmitted Diseases Treatment Guidelines and the updated 2012 revisions, the CDC recommends the following antibiotic regimen:

Recommended Prophylactic Regimens for Gonorrhea, Trichomoniasis, and Chlamydia infections

Ceftriaxone 250 mg Intramuscularly in a single dose

PLUS

Metronidazole 2 g orally in a single dose

PLUS

Azithromycin 1 g orally in a single dose

OR

Doxycycline 100 mg orally twice a day for 7 days

Avoid the use of Ceftriaxone in patients with anaphylactic reactions to penicillin.

Avoid Metronidazole use with alcohol as may cause nausea and vomiting

Avoid the use of Azithromycin in patients with allergy to erythromycin.

Avoid the use of Doxycycline in pregnant women or in children <8 years of age

Hepatitis B and human immunodeficiency virus infections (HIV) may also be transmitted through sexual assault. As indicated, vaccination and antiretroviral administration must be considered as part of a regimen to provide prophylaxis for patients against these potential pathogens. The hepatitis B vaccine should be administered intramuscularly to patients not previously immunized. The first dose is given in the emergency department, the second dose at 1–2 months and the third dose at 4–6 months. If the patient has not been immunized and the assailant is known to have acute or active hepatitis B, the addition of hepatitis B immune globulin (HBIG) should be considered.

HIV prophylaxis is a complex issue. Health care personnel must weigh the risk of HIV transmission to the patient against the time since the assault occurred, the potential side effects of the medications, and the likelihood of patient adherence to medications and follow up.

Children

The CDC states that “the identification of sexually transmissible agents in children beyond the neonatal period suggests sexual abuse.” There are exceptions to this general rule. The significance of the identification of a sexually transmitted agent in children as evidence of possible child sexual abuse varies by pathogen. Furthermore, the recommended action regarding the reporting of suspected child sexual abuse varies by the specific organism as outlined in the following table:

Implications of commonly encountered sexually transmitted (ST) or sexually associated (SA) infections for diagnosis and reporting of sexual abuse among infants and pre-pubertal children

ST/SA confirmed	Evidence for sexual abuse	Suggested action
Gonorrhea*	Diagnostic	Report†
Syphilis*	Diagnostic	Report†
Human immunodeficiency virus§	Diagnostic	Report†
Chlamydia trachomatis*	Diagnostic	Report†
Trichomonas vaginalis	Highly suspicious	Report†
Condylomata acuminata (anogenital warts)*	Suspicious	Report†
Genital herpes*	Suspicious	Report†¶
Bacterial vaginosis	Inconclusive	Medical follow-up

Source: Adapted from: Kellogg N, American Academy of Pediatrics Committee on Child Abuse and Neglect. The evaluation of child abuse in children. *Pediatrics* 2005;116(2):506–12.

* If not likely to be perinatally acquired and rare nonsexual, vertical transmission is excluded.

† Reports should be made to the agency in the community mandated to receive reports of suspected child abuse or neglect.

§ If not likely to be acquired perinatally or through transfusion.

¶ Unless there is a clear history of autoinoculation.

Testing

There is low yield of generalized STI testing among asymptomatic prepubertal children. The 2010 CDC STD Treatment Guidelines recommends that the decision to test should be made on a case-by-case basis. However, the following can place children at high risk for STIs and testing should be strongly considered:

- Symptoms/signs such as vaginal discharge or pain, genital itching or odor, urinary symptoms, and genital ulcers or lesions
- Suspected Assailant has or is at high risk for STI
- STI in a member of the child’s immediate household or environment
- Patient or parent requests testing
- Evidence of genital, oral, or anal penetration or ejaculation

If a child is thought to have a specific STI, the child should also be tested for other common STIs before treatment is started; as treatment for one STI could potentially interfere with the diagnosis of other STIs. Since chronic infection may be asymptomatic, consideration should be given to testing patients who have been chronically abused.

The low detection rates for STIs in children may be partly due to the limitations of currently available diagnostic tests. The legal and psychosocial consequences of a false-positive diagnosis could be detrimental; therefore, only tests with high specificities should be used. Culture has long been considered the gold standard in the diagnosis of *Neisseria gonorrhoeae* and *Chlamydia trachomatis* in this population due to its high specificity. However, difficulty in collecting adequate specimens and problems in maintaining the viability of organisms during transport and storage decreases its sensitivity. Because urine nucleic acid amplification tests (NAATs) are less invasive and provide greater sensitivity than culture especially in chlamydia, they have increasingly been used in children being evaluated for sexual abuse. Not all NAAT’s are acceptable for STI testing in children and careful consideration must be given to the type of NAAT used. If a NAAT is used, a positive result must be confirmed using a second test or a different molecular target. Per the 2010 CDC STD Treatment Guidelines, NAATs can be used as an alternative to culture with vaginal or urine specimens from girls, but culture remains the preferred method for urethral or urine specimens from boys and for extragenital specimens (pharynx and rectum) from all children. Enzyme immunoassay, non-amplified probes, and direct fluorescent antibody tests are not acceptable alternatives for culture.

Treatment

Prophylactic treatment for STIs is not routinely recommended in children because of the low risk of transmission of infection, the generally low prevalence of STIs in this population, and the decreased risk of ascending infection. In addition these patients generally have better follow up. All children should be referred to their pediatrician and/or a child abuse specialist for follow up.

Gonorrhea

- Incubation period: 2–7 days
- Modes of Transmission: Sexual Contact; Perinatal colonization can persist for up to 6 months
- Testing: Culture or Nucleic acid amplification test with mandatory confirmation
 - If clinically indicated, anal and pharyngeal specimens should be sent for culture
 - Gram stain, DNA probes, or enzyme immunoassay of oropharyngeal, rectal, or genital tract cannot be relied on in children and should not be used
- **Treatment**
 - Child \leq 45 kg and with uncomplicated Gonococcal Vulvovaginitis, Cervicitis, Urethritis, Pharyngitis, or Proctitis: Ceftriaxone 125 mg IM x 1
 - Child $>$ 45 kg: Treat with one of the regimens recommended for adults

Chlamydia

- Incubation Period: 7–21 days
- Mode of Transmission: Sexual Contact; Perinatally acquired infection up to 2–3 years of age
- Testing: Culture or Nucleic acid amplification test with confirmation mandatory
 - If clinically indicated, anal specimens should be sent for culture
 - Enzyme immunoassay and direct fluorescent antibody tests are unreliable for children and should not be used for evaluation of sexually abused children for chlamydial infection
- **Treatment**
 - Child $<$ 45 kg: erythromycin base or ethylsuccinate 50 mg/kg/day orally divided into 4 doses daily (maximum 2 g /day) for 14 days
 - Child \geq 45 kg, but $<$ 8 years: azithromycin 1 g orally x 1
 - Child \geq to 8 years: azithromycin 1 g orally x 1 or doxycycline 100 mg orally two times a day for 7 days

Syphilis

- Incubation period for primary syphilis is 10–90 days
- Mode of Transmission: Perinatal; Sexual Contact
- Testing: Nontreponemal tests (VDRL, RPR) used for screening but must be confirmed by a specific treponemal test (FTA-ABS or MHA-TP); false-positive rate about 1% to 2%
- **Treatment**
 - Primary and Secondary: benzathine penicillin 50,000 units/kg IM (maximum 2.4 million units in a single dose)

Trichomoniasis (*Trichomonis vaginalis*)

- Incubation period is 4–20 days
- Mode of transmission: Perinatal (can be present for months); Sexual contact; Non-sexual contact (rare but possible)
- Uncommon in prepubertal girls
- Testing: Wet mount and/or culture of vaginal discharge
 - Must be differentiated from other types of trichomonas if identified in urine or stool specimen
- **Treatment**
 - Child \geq 45kg: metronidazole 2 g orally x 1 or metronidazole 500 mg orally two times a day for 7 days
 - Child $<$ 45kg: metronidazole 15 mg/kg/day (maximum 250 mg per dose) orally three times a day for 7 days

Herpes Genitalis

- Incubation period is 2–20 days
- Mode of transmission: Perinatal; Sexual Contact; Autoinoculation
- Testing: Viral cultures
 - HSV-1 or HSV-2 can be found in the genital region—Identification of the virus type does not definitively differentiate sexual from non-sexual transmission
- **Treatment**
 - Adolescents: acyclovir 400 mg orally three times a day for 7–10 days or acyclovir 200 mg orally five times a day for 7–10 days or famciclovir 250 mg orally three times a day for 7–10 days or valacyclovir 1 g orally twice a day for 7–10 days. Treatment can be extended if healing is incomplete after 10 days of therapy
 - Children: acyclovir 80 mg/kg/day orally divided 4 times a day for 7–10 days: (Max—1200 mg/day)

Human Papilloma Virus (Condyloma acuminata— anogenital warts)

- Incubation Period: Variable and prolonged latency period of up to 3 years before the appearance of visibly detectable genital warts
 - Mode of transmission: Perinatal, Sexual contact, Autoinoculation
 - Has been diagnosed in children who have been sexually abused, but can also be found in children who have no other evidence of sexual abuse
 - Evaluation for other STIs should be considered
 - Neither clinical appearance of the lesions or HPV typing identifies the mode of transmission
 - Testing: Clinical Diagnosis
 - **Treatment**
 - Non-treatment an option due to high spontaneous resolution rate
 - Refer to gynecologist or dermatologist for further evaluation and consideration of following regimens*:
 - **Patient-Applied Treatment**
 - Podofilox 0.5% solution or gel applied with a cotton swab two times daily for 3 days followed by no therapy for 4 days. May Repeat cycle as needed up to 3 more times OR
 - Imiquimod 5% cream (Aldara) applied topically by the patient at bedtime three times a week for up to 16 weeks OR
 - Sinecatechins 15% ointment
 - **Provider–Administered Treatment**
 - Cryotherapy with liquid nitrogen or cryoprobe. Repeat applications every 1–2 weeks OR
 - Podophyllin resin 10%–25% topically followed in 1–4 hours by bathing, every week for 4 weeks OR
 - Trichloroacetic acid (TCA) or Bichloroacetic acid (BCA) 80%–90% OR
 - Surgical removal
- *None of the treatments eradicates the virus or prevents recurrence.

Hepatitis B

- Incubation period is 6 weeks to 6 months
- Mode of transmission: Perinatal, Sexual and Non sexual contact
 - Most HBV infections in children result from household exposure to persons who have chronic HBV infection
- Testing: Serology
- Treatment:
 - Hepatitis B vaccine for prophylaxis should be administered intramuscularly to patients not previously immunized with the first dose to be given in the emergency department, the second dose at 1–2 months and the third dose at 4–6 months
 - If the patient has not been immunized and the assailant is known to have acute or active hepatitis B, the addition of hepatitis B immune globulin (HBIG) should be considered

Bacterial Vaginosis

- Caused by a combination of organisms, including Gardnerella vaginalis and other anaerobic organisms
- Mode of Transmission: Bacterial vaginosis has been diagnosed in children who have been abused, but its presence alone does not prove sexual abuse.

Human Immunodeficiency Virus (HIV)

Evaluation and Management of Patients with a Possible Exposure to Human Immunodeficiency Virus (HIV) after Sexual Assault/Sexual Abuse

The use of antiretroviral agents after possible exposure to HIV must balance the potential benefits of the treatment with the potential risks. The decision to use antiretroviral agents must be made as soon as possible after the assault. The sooner antiretroviral agents are started, the higher the likelihood that they will prevent HIV transmission. The decision to begin or withhold treatment is made by both the health care professional and the patient after the patient has been adequately informed of the potential risks and benefits of the treatment options.

Much of the data for post exposure prophylaxis (PEP) is from health care worker studies, maternal-fetal studies, and animal studies. In cases of occupational exposure and in cases of perinatal transmission, studies in animals and humans have shown a reduction in risk of transmission of HIV when prophylaxis is given. These study findings have been extrapolated to potential HIV exposure by sexual assault. Risks of HIV transmission are available from data in patients who have engaged in consensual sex. The risk for HIV transmission from vaginal intercourse is reported to be 0.1%–0.2% and 0.5%–3% for receptive anal intercourse. The risk for HIV transmission from oral sex is much lower. There is no data regarding specific risk of HIV transmission in sexual assault. However, HIV has been reported in patients whose only known risk factor was sexual assault/abuse.

The CDC recommends initiating HIV prophylaxis within 72 hours of exposure to patients who present after sexual assault and have sustained a significant exposure to a known HIV positive assailant. In the vast majority of situations, the suspected assailant’s HIV status is not known, and the health care provider should make a case-by-case determination. The health care provider should assess whether or not a significant exposure has occurred during the assault such as direct contact of the vagina, anus, or mouth with the semen or blood of the assailant. Specific circumstances of an assault such as bleeding and trauma are thought to increase risk for HIV transmission. The presence of any genital lesions or STI in either the assailant or the patient may increase the risk of HIV transmission. Anal assault is thought to have the highest risk of HIV transmission followed by vaginal assault and lastly oral. A high viral load in ejaculate can also increase the risk of HIV transmission. In addition, repeated abuse or multiple assailants can increase the risk of HIV transmission. An assailant with high risk factors such as a man who has sex with other men and persons who use injection drugs or crack cocaine can also increase the risk that the assailant has HIV. It is not possible to know whether an assailant has HIV solely on the basis of risk behaviors and health care providers should be cautious on making judgment on perceived risk if assailant does not have known high risk factors.

Health care providers should discuss with the patient: 1) the exposure risks of the assault along with the general low risk of HIV transmission; 2) the unproven benefit of PEP in sexual assault; 3) potential side effects and risks of PEP; 4) the importance of close follow-up; and 5) the importance of adherence to recommended dosing for the full 28 days treatment period. Discussions with the patient regarding the decision of whether PEP is to be started should be documented in the patient’s chart along with the patient’s readiness and willingness to complete the PEP regimen. If it is determined that post exposure prophylaxis could be of benefit, it should be started as soon as possible within 72 hours of exposure with the first dose administered in the Emergency Department. Specialist consultation on PEP regimens is recommended if available. Assistance with PEP-related decisions can be obtained 24 hours a day 7 days a week by calling the National Clinician’s Post-Exposure Prophylaxis Hotline.

National Clinician’s Post-Exposure Prophylaxis Hotline 888-448-4911

If PEP is started, the health care provider should obtain baseline complete blood count, renal function, hepatic function tests, serum chemistry, baseline HIV antibody test and, in women, a pregnancy test. Initiation of PEP should not be delayed pending the results of a baseline HIV test. There are multiple regimens available for prophylaxis. Some specialists recommend the use of two-drug regimens while many recommend a three-drug regimen to maximize suppression of viral replication.

Below are two commonly prescribed three-drug prophylaxis options:

Three-Drug Regimens for Adults (28-Day Treatment)

Option 1

lopinavir plus ritonavir (**Kaletra**)—2 tablets orally twice daily (each tab contains 200mg lpv/50mg rtv) PLUS zidovudine/lamivudine (**Combivir**)—1 tablet (300mg/150mg) orally twice daily

Option 2

lopinavir plus ritonavir (**Kaletra**)—2 tablets orally twice daily (each tab contains 200mg lpv/50mg rtv) PLUS emtricitibine/tenofovir (**Truvada**)—1 tablet (200mg/300mg) orally once daily
An initial 3–7 day supply of a medication starter pack or prescription should be offered.

Side effects are common and multiple studies have shown low adherence to the prescribed prophylaxis regimen. Potential side effects of antiretroviral medication include nausea, vomiting, diarrhea, abdominal pain along with fatigue, headache, insomnia, rash, and taste alteration. In addition, lipid abnormalities, diabetes mellitus, renal toxicity, pancreatitis, hepatitis, neutropenia, anemia and lactic acidosis, hyperglycemia and diabetic ketoacidosis have been reported with antiretrovirals. PEP however appears to be generally well tolerated by both adults and children and severe adverse reactions are rare. All patients should receive close follow-up. Patients should also be alerted to possible symptoms of primary HIV infection such as fever, fatigue, sore throat, lymphadenopathy, and rash and instructed to seek medical care if they develop these symptoms. Patients should be advised to have HIV antibody testing repeated at 6 weeks, 3 months, and 6 months after the assault.

Special Consideration for Children

Children might be at higher risk for HIV transmission, because the sexual abuse of children is frequently associated with multiple episodes of assault. Consult a pediatric HIV specialist if PEP is considered. Children should also be reevaluated and tolerance of medication assessed. HIV is a reportable disease if neonatal transmission or other risk factors for transmission such as blood transfusion are not present.

Emergency Contraception (EC)

The risk of pregnancy after sexual assault is estimated to be 5%. As indicated, reproductive-aged female patients who have been sexually assaulted should be evaluated for pregnancy. Urine or serum pregnancy tests in sexual assault patients of childbearing age should be obtained. Health care providers should discuss with the patients the option of emergency contraception if pregnancy is not desired. Various treatment options exist for emergency contraception. These include progestin only medications, selective progesterone receptor modulators, and off label use of commonly available brands of oral contraceptive pills. Emergency contraception is most effective when taken as soon as possible after the assault. Patients must understand that there is a failure rate of pregnancy prophylaxis. Patients who receive emergency contraception should be instructed to seek care if their menstrual cycle is delayed by more than 1–2 weeks. Side effects may include nausea, abdominal pain, fatigue, headache, breast tenderness, dizziness, early or late menses and vaginal bleeding. Administration of an anti-emetic is suggested secondary to medication-induced nausea. If patient vomits within 2–3 hours of emergency contraception, consideration should be given to repeat dosing.

Levonorgestrel is a Progestin only emergency contraception (Plan B, One Step, Next Choice) effective within 120 hours (5 days) after unprotected intercourse. Efficacy decreases with increasing time and it is most effective if taken within 72 hours. This type of Emergency contraception will not end an existing pregnancy, does not cause birth defects, and can be safely used by breastfeeding women. In the United States, emergency contraception utilizing progestin-only pills is available over-the-counter to individuals aged ≥17 years and by prescription to younger patients.

Ulipristal acetate (ella) is a selective progesterone receptor modulator (SPRM) emergency contraception effective within 120 hours (5 days). It is available only with a prescription. Ulipristal acetate may be more effective at preventing pregnancy than progestin-only pills, especially if it has been greater than 72 hours since the assault. Before taking Ulipristal acetate, a pregnancy must be excluded.

If these medications are not readily accessible, many commonly available brands of oral contraceptive pills such as Ovral can effectively provide emergency contraception. Patients must be instructed to take an appropriate and specified number of tablets. Prophylaxis may be achieved by administering two ethinyl estradiol/norgestrel (Ovral) tablets within 72 hours of the assault followed in 12 hours by another two Ovral tablets. This method has been associated with increased side effects and is less effective than the other types of emergency contraception.

Recommended Emergency Contraception Medications

Levonorgestrel 1.5 mg administered orally as a one-time dose

OR

Ulipristal acetate 30 mg administered orally as a one-time dose

OR

Many Commonly Available Contraceptive Pills—Dosage depends on pills utilized

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HIV

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Chapter 15

Bite Mark Guidelines

Ralph Riviello, MD, MS, FACEP

Bite marks can provide important forensic clues in criminal cases. Bite marks are often seen in rape and sexual assault cases, assaults, homicides, and abuse crimes (child, elder, and IPV). For the emergency medicine provider, the most important aspects of bite marks are to recognize their presence and to properly collect potential DNA specimens from them. A forensic odontologist through the use of impressions, casts and overlays of the bite mark can potentially identify and confirm the rapist. Those techniques are beyond the scope of this handbook.

A bite mark will typically present as a semi-circular injury, which compromises two separate arcs (one from the upper teeth and one from the lower teeth) with either a central area absent of injury or with a diffuse bruise. It is not uncommon to see only one arch of teeth, usually from the lower teeth. The amount of bruising present depends on the amount of suction force applied during the bite. Several factors influence the severity of a bite-mark injury:




- The force by which the original injury was inflicted;
- The anatomical location bitten;
- The time elapsed between infliction and presentation.

Scrape marks from the teeth may be seen. Factors such as clothing and any movement or struggle while biting, can affect the appearance and depth of a bite wound.

Bite marks can be both attack injuries (present on the victim) and defensive wounds (present on the attacker). A study of 148 bite marks showed that females were four times more likely to be bitten than males, and over 50% of the males in the study were the suspects. Females were more likely to be bitten on the breast, arm and legs; and children on their genitals, legs, and back. Males were most commonly bitten on the hand, back, or face. Overall location rates were, breast (28%), arm (18%), genitalia (8%), back (7%), and thigh (6%). (Pretty 2000)

Researchers have developed a bite mark severity scale to describe the forensic significance of the injury and whether or not it can be compared with the suspect. However, for the emergency clinician, any bite mark has the potential to yield forensically important evidence (DNA).

The Bite Mark and Severity Scale

<p>Increasing wound severity</p> 	1. Very mild bruising, no individual tooth marks present, diffuse arches visible may be caused by something other than teeth—low forensic significance.	 <p>High Forensic Significance</p> 
	2. Obvious bruising with individual, discrete areas associated with teeth. Skin remains intact—moderate forensic significance.	
	3. Very obvious bruising with small lacerations associated with teeth on the most severe aspects of the injury. Likely to be assessed and definite bite mark—high significance.	
	4. Numerous areas of laceration, with some bruising, some areas of the wound may be incised. Unlikely to be confused with any other injury mechanism—high significance.	
	5. Partial avulsion of tissue, some lacerations present indicating teeth as the probable cause of the injury—moderate forensic significance.	
	6. Complete avulsion of tissue, possibly some scalloping of the injury margins suggesting that teeth may have been responsible for the injury. May not be an obvious bite injury—low forensic significance.	

Emergency Department Evaluation

A systematic evaluation of all bite marks should be conducted. Standard demographic information should be recorded and a complete forensic history should be taken. The patient should be specifically asked about potential areas that were bitten. A head-to-toe survey should be performed looking for potential and/or obvious bite marks. When a bite mark is discovered, the following steps should be taken:

I. Description of bite mark

A. Location of bite mark

1. Describe anatomic location
2. Describe surface contour: flat, curved, irregular
3. Describe tissue characteristics
 - a. Underlying structure: bone, cartilage, muscle, fat
 - b. Skin: relatively fixed or mobile

B. Shape

Describe as essentially round, ovoid, crescent, irregular, double

C. Color

Note the color, such as red, purple, and so on

D. Size

1. Vertical and horizontal dimensions of the bite mark should be noted, preferably in the metric system.
2. The distance between canines should be documented, if clear. The circular arc should be documented (preferably with a metric scale such as the ABFO #2 scale; if a metric scale is not available, a quarter next to the wound in one picture can be substituted).
3. The presence or absence of suction applied to the bite area should be documented when possible.

F. Type of injury

1. Petechial hemorrhage
2. Contusion (ecchymosis)
3. Abrasion
4. Laceration
5. Incision
6. Avulsion
7. Artifact

G. Other information

1. Note whether the skin surface is indented or smooth
2. Any other wound characteristics or findings
3. Consider the need for evaluation of a forensic odontologist to assess the bite wound

II. Collection of evidence from patient

Gathering bite mark evidence should be done with authorization from the patient (and/or the proper authorities). Note whether the bite mark has been affected by washing, contamination, lividity, change of position, and so on.

A. Photography

1. Orientation and close-up photographs with and without a metric scale marker, and containing identifying information (case number, date, initials, and so on)
2. Photographic resolution should be of high quality (a macro lens with ring and point flash)
3. If color film is used, accuracy of color balance should be ensured
4. In using the scale, ensure that it is on the same plane and adjacent to the bite mark. It is desirable to include a circular and a linear scale. The ABFO #2 scale incorporates both of these elements.
5. All of the photographs should be taken with the camera at 90° (perpendicular) to the injury
6. Ultraviolet light can be used to photograph bite wounds that are fading, even when the overlying skin appears totally normal. This method should be used when historically indicated.
7. The most critical photographs should be taken in a manner that will eliminate distortion. Some cameras have interchangeable focusing screens. Use of an architectural grid screen in conjunction with the ABFO #2 scale will help reduce distortion.
8. It is beneficial to obtain serial photographs of the bite mark over a period of time

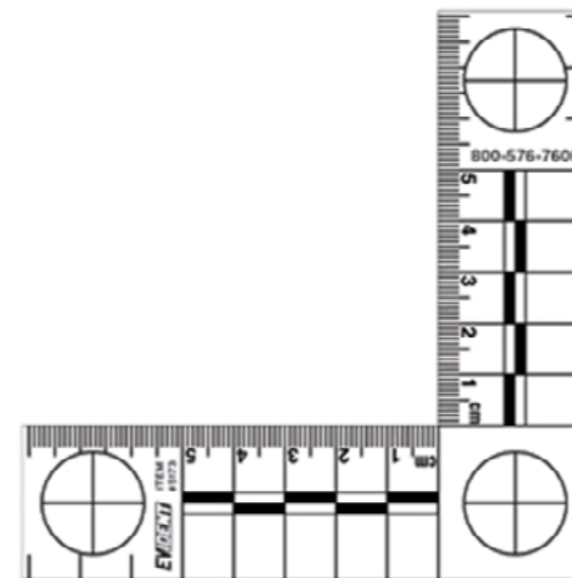
B. Salivary swabbing

1. Whenever possible, bite mark trace evidence should be collected as guided by the patient history and/or the use of an alternative light source using the most up to date technology possible
2. Use the **double-swab technique** to collect the saliva
 - a. Immerse the tip of the first swab in water
 - b. Roll the tip of the swab over the skin using moderate pressure and circular motions
 - c. Air dry the swab
 - d. Do not moisten the second swab, but use it dry
 - e. Roll the tip of the swab over the skin using moderate pressure and circular motions
 - f. Air dry the swab
 - g. Package both swabs together according to jurisdictional policy
 - h. Do not lick the evidence envelope because it will contaminate the sample

C. Medical Treatment

1. The wound should be assessed for the potential of developing infection and disease transmission (10–15% become infected). The greater the amount of skin disruption, the more likely that an infection may develop.
2. Consider prophylaxis with oral antibiotics that cover typical oral pathogens/flora.
3. Clinicians should also consider the possibility of Hepatitis B and, less likely, HIV transmission from the bite and provide prophylaxis when appropriate.

Figure 1: ABFO #2 Scale



Resources

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Chapter 16

Strangulation

William M. Green, MD, FACEP

A Complexity of Challenges

- Criminal Justice issues
 - Strangulation is an extremely common and very serious problem in domestic violence
 - Up to 68% of DV victims have been strangled by their male partner in their lifetime
 - Up to 47% of DV victims have been strangled in the last year
 - 18–43% of DV homicide victims had been strangled
 - Sexual assault and domestic violence are frequently intertwined
 - At least 75% of sexual assault victims know their assailant
 - The prevalence of strangulation in sexual assault has not been specifically studied, but it is estimated that at least 15% of sexual violence includes strangulation
- Medical issues
 - Strangulation is potentially life-threatening
 - Initial patient presentation may be minimal or subtle
 - Under-appreciation of the risk (by all involved)
 - Historically limited medical evaluation and treatment
 - Subsequent deterioration and bad outcomes may occur
 - Historically poor medical documentation and little or no forensic documentation...until the autopsy
- Forensic issues
 - Limited/poor forensic documentation
 - Little or no medical testing (objective proof of injury)

Basic Physiology

- The brain needs a continuous supply of oxygen
- Without oxygen, brain cells quickly malfunction and die
- Two vital bodily systems must work perfectly and in unison
 - Respiratory
 - Cardiovascular
- Multiple areas of vulnerability exist in both systems
- Compromise of a single area may rapidly produce a very bad outcome
- Respiration delivers oxygen into the blood
- Air must pass through the mouth and nose, the upper air passages, the larynx, the trachea, and into the lungs
- Air must flow in and out of the lungs
- The chest and diaphragm muscle work together to create the “bellows” that moves the air
- The lungs extract oxygen from the air and shift it into the blood (**oxygenation**)
- Oxygen-rich blood is pumped by the heart through the carotid arteries in the neck up to the brain
- After the oxygen is delivered, carbon dioxide and other waste products are transferred from the cells into the blood and returned (by the jugular veins in the neck) to the lungs to be exhaled
- The next breath begins the cycle of oxygenation again

Mechanisms and Definitions

- **Asphyxia:** brain cells deprived of oxygen
 - Lungs deprived of air (failure of respiration)
 - Brain deprived of blood (failure of blood flow)
 - Combination of mechanisms
- Common clinical features during asphyxia (symptoms and signs)
 - Pain
 - Anxiety
 - Altered consciousness
 - Unconscious in 10–15 seconds
- **Strangulation:** external pressure applied to neck until consciousness is altered
 - Manual (most common method in domestic violence and sexual assault)
 - One hand
 - Both hands
 - Other body part (knee, “choke hold,” etc)
 - Ligature (cord-like object used to apply pressure to the neck)
- Strangulation may impair blood flow, airflow or both
 - Compromised blood flow to the brain
 - Compression of one or both Carotid Arteries
 - Compromised airflow to the lungs
 - **Suffocation:** process that halts or impedes respiration
 - ◊ **Choking:** object mechanically blocks the upper airway or windpipe (trachea)...often inappropriately used to describe strangulation!
 - ◊ **Smothering:** mechanical obstruction to airflow into the nose and mouth
 - ◊ **Compressive Asphyxia:** external limitation of chest motion (assailants body weight on victim)

Pathophysiology

- Damage to **larynx** and/or **hyoid bone**
 - Contusion:
 - 22 pounds of pressure
 - Hemorrhage
 - Edema
 - Occlusion (temporary)
 - 33 pounds of pressure
 - Fracture:
 - 35–46 pounds of pressure
 - Combinations
- Damage to Carotid Arteries (causes compromised blood flow to brain)
 - Immediate (acute) impairment
 - Frontal force (5.5–22 lb) compresses arteries against neck bones
 - Single carotid artery compressed or blocked—may create neurologic findings on opposite side of body
 - Both carotids compressed or blocked—rapid loss of consciousness (as soon as 10 seconds)
 - Slower onset (delayed) findings
 - Bleeding and internal artery damage (**intimal tears**)
 - Blood clots form inside artery (**thrombosis**)—blocked blood flow
 - Blood clots break off and travel to brain (**embolization**)—blocked blood flow
 - Neurologic findings develop because of dysfunction in areas of the brain “down stream” from the area deprived of blood flow
- Return of blood from the brain may be compromised (**venous outflow obstruction**)
 - 4.4 pounds of pressure on **jugular veins** causes back up of blood lacking oxygen (**stagnant hypoxia**)
 - 5–30 seconds of compression causes altered consciousness

- Common clinical findings
 - Tiny surface blood vessels rupture from increased internal pressure
 - **Petechiae** (face, mucous membranes)
 - **Sub-conjunctival hematoma** (sclera or white part of the eye)
- Blood vessel ruptures may occur internally (not visible)
- Less common medical problems after strangulation
 - Compression of the **carotid body** (an important neurologic structure in the neck)
 - Problems may begin after 3–4 minutes of sustained pressure
 - **Carotid sinus reflex** is stimulated
 - **Bradycardia**
 - Altered consciousness (lightheadedness or loss of consciousness)
 - May progress to cardiac arrest
 - Neck (cervical vertebrae) fractures
 - Rare (except in long-drop hanging)
 - Pulmonary Edema
 - Often delayed development (up to 2 weeks)

Clinical Symptoms

- Neck pain and sore throat
 - Very common (60–70%)
 - Usually related to direct trauma (blunt force)
- Breathing changes or difficulty
 - Very common (up to 85%)
 - Psychogenic (**hyperventilation**)
 - Laryngeal injury, swelling, bleeding
 - Pulmonary edema—late finding
 - Breathing problems may be delayed (up to 2 weeks)
 - Worsening of other conditions (e.g. asthma)
- Voice changes
 - Very common (up to 50%)
 - Hoarse or raspy voice
 - Inability to speak
 - Coughing
 - Laryngeal injury, swelling, bleeding
 - *Suggestion: document with voice recording*
- Swallowing abnormalities
 - Very common (up to 44%)
 - Difficulty swallowing (**dysphagia**)
 - Painful swallowing (**odynophagia**)
 - Laryngeal injury, swelling, bleeding
 - Esophageal injury, swelling, bleeding
 - May be immediate or delayed (up to 2 weeks)
- Mental status and consciousness changes
 - Light-headedness and dizziness
 - Loss of memory
 - Loss of consciousness
- Behavioral changes
 - Early: agitation, restlessness, combativeness
 - Late:
 - Impairments in memory, concentration, sleep
 - Mental health issues (anxiety, depression, dementia)

- Mental status and behavioral changes
 - Main cause: brain cells deprived of oxygen
 - Brief interruption
 - Findings (symptoms and signs) are temporary and resolve
 - Longer interruption
 - Findings are permanent and do not resolve (may improve partially, but not completely)
 - Anoxic brain damage
- Other neurologic symptoms and signs
 - Vision changes
 - Tinnitus
 - Facial or eyelid palsies
 - Hemiplegia
 - Incontinence (bladder or bowel)
 - Miscarriage

Clinical Symptoms Caveats

- Symptoms are subjective (described by patient)
- Documentation is essential
 - Symptoms may resolve or change
 - Recording patient experience provides a degree of objectivity
 - Objectivity is strengthened by multiple/consistent descriptions
- Some symptoms may be non-specific or have multiple causes (but must be thoroughly explored and recorded)
 - Light-headedness and dizziness
 - Difficulty breathing
- Impairment of memory and/or consciousness
 - May compromise accuracy and credibility of the history
 - Must be explored in detail and carefully documented
- No visible findings
 - Very common (up to 50%)
 - Pain (subjective discomfort)
 - Tenderness (discomfort with palpation)
 - Other symptoms are often present
- **Caution! Lack of visible findings (or minimal injuries) does not exclude a potentially life threatening condition**

Clinical Findings

- Visible findings: **Petechiae**
 - Compression impedes venous blood flow (**venous return**)
 - Venous pressure increases
 - Small blood vessels near skin or mucous membrane surfaces rupture
 - Multiple tiny red spots appear (1–2 mm)
 - Non-palpable (or “flat”—can’t feel them on exam)
 - Non-tender (no discomfort when touched)
 - Do not blanch (temporarily change color when touched)
- **Caution!** “petechiae” may be used inappropriately to describe direct blunt trauma findings
- Visible findings: **Sub-conjunctival Hematoma**
 - Compression impedes venous blood flow
 - Venous pressure increases
 - Small blood vessels on the surface of the eye (**sclera**, or white part) rupture
 - Appearance is very disturbing to patient and family
 - Not dangerous; no treatment required; resolves within 2 weeks
 - Does not impair vision

- Visible findings: Neck Injuries
 - Redness (**hyperemia** or **erythema**)
 - Fades quickly
 - Bruising (**contusion** or **ecchymosis**)
 - Often not visible initially
 - Scratches and abrasions
 - Common
 - May be self-defense injuries
 - Ligature marks
 - **Abrasions**
 - Bruises (**contusion** or **ecchymosis**)
 - Redness (erythema)—fades quickly
- **Suggestion: Use the Forensic Approach during evaluation**
 - Look for “**patterning**” of findings
 - appearance gives information about cause or mechanism of injury
 - Understand the “**mechanism of injury**”
 - Compare and correlate the history of what happened to the physical findings
 - Assess consistency
 - Use follow-up examination(s) + forensic imaging
 - Document emerging or evolving injuries
 - Compare and clarify non-specific findings
 - ◊ Redness (**erythema**)
 - ◊ Swelling (**edema**)

Management and Documentation

- Clinical management: **MEDICAL EVALUATION REQUIRED**
 - Stabilization
 - Diagnostic evaluation (exam, imaging, consultation)
 - Treatment and/or observation
- Forensic management
 - Consider neck swabs (assailant saliva, epithelial cells for touch DNA)
 - Follow-up evaluation (exam, imaging studies)
- Documentation
 - Forensic exam form (e.g. DV exam form or Sexual Assault exam form)
 - Medical (ED report, consultation report, imaging)
- A separate “Strangulation Form” is useful for complete documentation and should include:
 - Narrative of event
 - History of injury causing events (mechanisms of injury)
 - Patient symptoms (initial and current)
 - Physical exam findings
 - Check list
 - Body diagrams
 - Diagnostic evaluation
 - Clinical assessment
 - Management
 - Follow-up plan

Clinical Manifestations—CAUTION!

- “Strangulation survivors who appear stable can harbor insidious injuries associated with high morbidity and mortality if not recognized and treated in a timely fashion” (Taliaferro, Hawley, McClane and Strack 2009)”
- Common pitfalls in caring for strangulation patients:
 - Attempting to predict outcome based on initial condition of the patient
 - Premature discharge of patient who has been strangled within the past 24–36 hours

Evolving Clinical Approach

- Many experts recommend admission/observation of all strangulation patients for at least 24 hours
- Recent guidelines: **Observe 12–24 hours if any of the following occurred**
 - History of loss of consciousness
 - Facial and/or conjunctival petechiae
 - Neck soft tissue injury
 - Incontinence (urinary or fecal)
 - Intoxicated and/or poor home observation potential
- Safe to discharge patient if:
 - No loss of consciousness
 - No or minimal neck soft tissue injury
 - No neurologic complaints/findings
 - Reliable home monitoring

Clinical Evaluation in the ED

- ABC’s (airway, breathing, circulation)
 - Pulse Oximetry
- Cervical spine precautions
- Structured history and physical exam
 - Check-list
 - Dedicated form
- Consultation(s)
- Fiberoptic laryngoscopy
 - ENT consultation
 - Laryngeal pathology only (some life-threatening)
- Imaging Strategies in the ED
 - Plain neck X-rays rarely helpful (hanging with drop)
 - Neck CT with IV contrast—soft tissue injury
 - CT angiography of carotids
 - Intimal tears
 - Thrombosis
 - Maximum sensitivity = 82%
 - 4 vessel carotid angiography: 100% sensitivity
 - Doppler ultrasound of carotids: 80–90% sensitivity
 - MRI
 - Best overall modality for strangulation
 - Best early detection of life-threatening problems
 - Deep soft tissues
 - Larynx and hyoid bone
 - Vascular injuries
 - MRI is strongly recommended
 - History of loss of consciousness
 - Facial or conjunctival petechiae present

Additional Resource

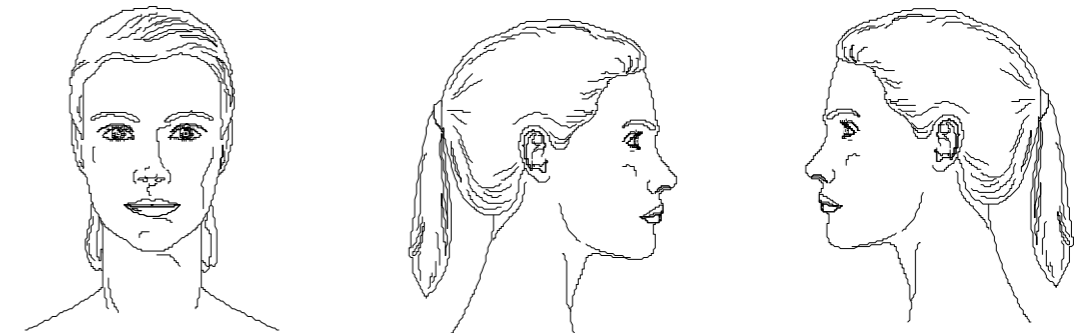
1. National Strangulation Training Institute www.strangulationtraininginstitute.org

Documentation Chart for Non-Fatal Strangulation Cases

Symptoms and/or Internal Injury

Breathing Changes	Voice Changes	Swallowing Changes	Behavioral Changes	OTHER
<input type="checkbox"/> Difficulty Breathing <input type="checkbox"/> Hyperventilation <input type="checkbox"/> Unable to breathe Other:	<input type="checkbox"/> Raspy voice <input type="checkbox"/> Hoarse voice <input type="checkbox"/> Coughing <input type="checkbox"/> Unable to speak	<input type="checkbox"/> Trouble swallowing <input type="checkbox"/> Painful to swallow <input type="checkbox"/> Neck Pain <input type="checkbox"/> Nausea/Vomiting <input type="checkbox"/> Drooling	<input type="checkbox"/> Agitation <input type="checkbox"/> Amnesia <input type="checkbox"/> PTSD <input type="checkbox"/> Hallucinations <input type="checkbox"/> Combativeness	<input type="checkbox"/> Dizzy <input type="checkbox"/> Headaches <input type="checkbox"/> Fainted <input type="checkbox"/> Urination <input type="checkbox"/> Defecation

Use face and neck diagrams to mark visible injuries



Face	Eyes & Eyelids	Nose	Ear	Mouth
<input type="checkbox"/> Red or flushed <input type="checkbox"/> Pinpoint red spots (petechiae) <input type="checkbox"/> Scratch marks	<input type="checkbox"/> Petechiae to R and/or L eyeball (circle one) <input type="checkbox"/> Petechiae to R and/or L eyelid (circle one) <input type="checkbox"/> Bloody red eyeball(s)	<input type="checkbox"/> Bloody nose <input type="checkbox"/> Broken nose (ancillary finding) <input type="checkbox"/> Petechiae	<input type="checkbox"/> Petechiae (external and/or ear canal) <input type="checkbox"/> Bleeding from ear canal	<input type="checkbox"/> Bruising <input type="checkbox"/> Swollen tongue <input type="checkbox"/> Swollen lips <input type="checkbox"/> Cuts/abrasions (ancillary finding)
Under Chin	Chest	Shoulders	Neck	Head
<input type="checkbox"/> Redness <input type="checkbox"/> Scratch marks <input type="checkbox"/> Bruise(s) <input type="checkbox"/> Abrasions	<input type="checkbox"/> Redness <input type="checkbox"/> Scratch marks <input type="checkbox"/> Bruise(s) <input type="checkbox"/> Abrasions	<input type="checkbox"/> Redness <input type="checkbox"/> Scratch marks <input type="checkbox"/> Bruise(s) <input type="checkbox"/> Abrasions	<input type="checkbox"/> Redness <input type="checkbox"/> Scratch marks <input type="checkbox"/> Finger nail impressions <input type="checkbox"/> Bruise(s) <input type="checkbox"/> Swelling <input type="checkbox"/> Ligature mark	<input type="checkbox"/> Petechiae (on scalp) Ancillary findings <input type="checkbox"/> Hair pulled <input type="checkbox"/> Bump <input type="checkbox"/> Skull fracture <input type="checkbox"/> Concussion

Questions to ASK: Method and/or Manner

How and where was the victim strangled?

- One Hand (R or L)
- Two hands
- Forearm (R or L)
- Knee/Foot

Ligature (Describe): _____

How long? _____ seconds _____ minutes

Also smothered?

From 1 to 10, how hard was the suspect’s grip? (Low): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 (high)

From 1 to 10, how painful was it? (Low): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 (high)

Multiple attempts: _____ Multiple methods: _____

Is the suspect **RIGHT** or **LEFT** handed? (Circle one)

What did the suspect say while he was strangling the victim, before and/or after?

Was she shaken simultaneously while being strangled? Straddled? Held against wall?

Was her head being pounded against wall, floor or ground?

What did the victim think was going to happen?

How or why did the suspect stop strangling her?

What was the suspect’s demeanor?

Describe what suspect’s face looked like during strangulation?

Describe Prior incidents of strangulation? Prior domestic violence? Prior threats?

MEDICAL RELEASE

To All Health Care Providers: Having been advised of my right to refuse, I hereby consent to the release of my medical/dental records related to this incident to law enforcement, the District Attorney’s Office and/or the City Attorney’s Office.

Signature: _____ Date: _____

Copyright: National Family Justice Center Alliance, San Diego, CA.

Chapter 17

Forensic Photography: Overview of Basic Principles for Health Care Professionals

William M. Green, MD, FACEP

Utility of Forensic Photography

- “A good photograph is tantamount to stopping the clock”
- When injuries have healed, photographs in the medical/forensic record provide visual documentation of the injuries
- Forensic photographs document visible evidence findings before they are disturbed or collected

Utility of Forensic Images

- Review photo documentation during and after exam for:
 - Technical quality of images
 - Accurate representation of all findings
- Consultation/second opinion
- Measurements of injuries and other findings
- Compare findings to published literature
- Standard for subsequent exam/comparison
- Court
 - Preparation for testimony
 - Enhances and supports testimony
- Training and education

Digital Forensic Photography

- Digital imaging is changing photography by speeding up and simplifying many photographic processes.
 - Instantly review image quality, content and composition
 - Easily enhance image to accurately show what the examiner saw
 - Easily import images
 - Easily file, store, and transfer images
 - Easy means of building image databases
 - Cost effective

Forensic Imaging for Non-Professional Photographers

- Excellent quality forensic images are obtainable with a basic digital camera
- The more images, the better
- Basic equipment, skills and techniques will address most forensic photographic situations
- Practicing forensic photographic skills and techniques with mentoring and feedback is more productive than lectures about photographic theory and philosophy
- Equipment
- Camera

Admissibility of Digital Photographs

- Federal: Rules of Evidence, Article X, Rule 101(3); Any printout shown to accurately reflect the data is an “original”
- Rule 101(4)/103; a duplicate that accurately reproduces the original is admissible

Photographs as Evidence

- The principal legal requirements to admit a photograph (digital or film-based) into evidence:
 - Relevance (of the image to the issues)
 - Determined by the judge
 - Authentication (accurate representation)
 - Examiner must testify that photos accurately portray the scene as viewed during the exam

Guidelines to Ensure Admissibility

- Develop a Standard Operating Procedure (SOP), Department Policy, or General Order on the use of digital imaging
- Include:
 - Patient consent for photography as well as the utilization of images
 - Chain of custody
 - Image security and authorization for access
 - Image enhancement details
 - Policy regarding duplication and release
 - Storage and archival policies
 - Secure image back-up system
- Always preserve the original digital images (originals are never removed or altered)
- Preserve images in the original file format
- Images must be recorded in an unalterable, archival form soon after they are created
- If an image is to be enhanced, create a new file (original remains unchanged)
 - Record all details of the enhancement
- Agency must control custody and release of all image records
- Make available image copies in “read-only” format to those with legitimate access

Huge spectrum of camera complexity and cost

- Necessary features:
 - At least 6 megapixels
 - Macro (close-up) capability
- Nice Features:
 - Vibration Reduction/Image Stabilization
 - Spot Metering
 - View finder

Basic Equipment

- Extra Batteries
- Media Storage cards
- Reference Scales (Basic & Color)
- Identification Stickers
- Cleaning Supplies
- Camera manual

Additional Equipment

- Tripod / Monopod
- Off Camera Flash
- LED Flashlight
- Card reader
- Computer

Preparation for Shooting

- Read your camera manual
- Plan ahead; anticipate needed equipment and supplies
- Clean lens, LCD and view finder
- Perform “pre-shoot” checklist of equipment and camera settings
- Avoid environmental extremes

Shooting Menu: Suggested Initial Settings

- File Format: JPEG
- Image Quality: Fine
- Image Size: Largest
- White Balance: Auto
- ISO Sensitivity: Auto
- Metering: Center Weighted
 - (Optional: Spot)
- Continuous: Single
- Auto Focus Area Mode: Auto
 - (Optional: Center)
- Engaging Macro Mode
- Macro mode allows close-up images that reveal detail
- Macro may be accessed:
 - By a shortcut using the “tulip” icon
 - As a scene mode (also using a “tulip” icon)
- Using macro mode requires setting the zoom feature at the widest angle

Basic Forensic Photography: Principles and Techniques

- The images should tell the story
- The images should stand alone without captions or narration
- Complete “forensic” series of photographs
 - Overview (includes two anatomic landmarks for orientation)
 - Mid-range (closer but still includes one anatomic landmark)
 - Overview and midrange may show more than one finding
 - Closeups (one image with and one image without reference scale; closeups document only one finding)
- “Do not disturb the crime scene”—photograph the injury or finding before it is disturbed or collected
- Attention to camera angles (sensor, reference scale and image planes must all be parallel)
- All data regarding the image is automatically recorded and imbedded in the image (“EXIF” data)
- Sharpness (check by “zooming in” on the review image just after it is taken)
- Exposure (automatic in all digital cameras)
- Lighting (room lighting is usually sufficient but built-in flash is always an option)
- Plan the composition (construct the image)

Compositional Principles

- Goal: accurately document physical and evidence findings
- Artistry less important than consistency of technique and reproducibility of results
- Must depict findings as realistically (what the examiner’s eyes see) as possible
- Vary perspective; use different angles/distances to thoroughly document the finding
- Use measuring device (reference scale) to document size of findings (positioned on same plane and at the same distance from the camera as the finding)
- Bite mark photography may require specialized techniques and many images
- Background is important—avoid confusing clutter

Practical Tips

- Visualize the intended image in your mind
- Scan the entire image in the view finder or on the LCD screen during composition before depressing the shutter button
- An LED flashlight can provide tangential lighting (which highlights three-dimensional features)
- Use patient identification sticker on the scale (consider including the anatomic location)

Common Errors

- Out of Focus
- Under/over exposed
- Distortion of perspective
- No anatomical landmarks
- Distorted color

Legal Issues

- Obtain written patient consent to be photographed
- All images must be reliably linked to the patient being photographed
- All images must indicate
 - Date and time they were taken
 - Basic camera settings
 - Digital EXIF data imbeds this information automatically in each image
- No image should ever be deleted (image sequence numbers must be unbroken)

Chapter 18

Quality Assurance for Sexual Assault Services

William M. Green, MD, FACEP

Improving Practice and Promoting Effective Community Partnerships

Quality Assurance: Basic Definition

A program for the systematic monitoring and evaluation of the various aspects of a project, service, or facility to ensure that standards of quality are being met

Merriam Webster Dictionary

Two Areas of Focus

- Sexual Assault Forensic Exam (SAFE) Team
 - Performance of medical and forensic tasks
 - Operational functioning of the team
 - Patient satisfaction
 - Effectiveness of oversight and supervision
- Sexual Assault Response Team (SART)
 - Operational functioning of the team
 - Effective communications and problem solving
 - Outcomes
- Patient
- Criminal Justice
- Collaborative, inter-agency issues are addressed

General Objectives

- Identify areas in need of improvement
- Promote best practices
- Track data
- Determine educational needs
- Address quality concerns
 - Examiner issues
 - Patient concerns
 - System performance

Fundamental Questions

- Are established standards being employed?
- Are patient-centered “Best-Practices” being used?
- Who is responsible for insuring “quality”?
- Given the available resources, what is realistic?
- What outcomes will be evaluated and how will they be measured?
- Why do it? Is anybody watching?



SAFE Team Quality Assurance

Operational Issues

- Medical and forensic records
 - Legible
 - Complete
 - Accurate
 - Concise
- Adherence to forensic exam protocol
- Response times/ resource utilization
- Image management system

Professional Issues

- Documentation
 - Physical findings
 - Accurate identification
 - Correct terminology
 - Evidence management
 - Forensic photography
 - Clinical judgment
 - Medical
 - Forensic

Examiner Team Evaluations

- Chart review system
- Peer review system
- Continuing Education: keeping examiners current
- Courtroom performance

What is Reviewed?

- Chart Reviews
 - Forensic forms
 - Narrative or addendum
 - Forensic images
- Associated material
 - Medical record/ED report/hospital labs
 - Crime lab results/reports
 - Court testimony (transcript)

Chart Reviews

- Who gets reviewed?
 - New examiners
 - Established examiners
 - High-profile charts
 - Problematic cases
 - Random review of all examiners
- Commonly reviewed items and issues
 - Medical screening exam
 - Consents signed
 - Evidence collection and handling
 - Injury descriptions
 - Documentation complete
 - Medical decision-making
 - Forensic imaging documentation and quality
 - Follow-up and referrals
 - Signatures
- Types of audits
 - Comprehensive
 - Focus (specific topics)
 - Forensic images
 - Medical issues
 - Evidence management
- Types of feedback
 - Supervisor to individual
 - Discussion and accountability
 - Supervisor to examiner group
 - Discuss trends, policy and training
 - Reports
- Factors for corrections and changes
 - Written policies and guidelines
 - Formal documentation
 - Agreement and accountability
 - Examiner
 - Supervisor
 - Notification of appropriate stakeholders
 - System must address both written documents and forensic images

Peer Review

Colleagues Evaluate Each Other's Work

- Compliments the supervisor's review of documents and images
- Types of peer review activities
 - Regular agenda activity at team meeting
 - Random cases distributed to group
 - Group review of same case
 - Sub-group (often pairs) reviews each other's work and gives feedback

Peer Review: Caveats

- Discovery issues
 - Candid review of performance, problems and deficiencies is essential and must be protected
 - Consider a medical quality assurance format
 - Be aware of confidentiality to HIPAA
- Peer review is PART of quality assurance...not the total program
 - The key is the inclusion of EXPERTISE

SAFE Team Quality Assurance: Evaluating the Evaluators

- How do you find "experts" to check the checker?
- Input from other multidisciplinary members
- Evaluate credentials, experience and certifications
- Multi-center comparative reviews
- Independent expert program audits

Supervisor and Peer Review Logistics

- Individual feedback
- Regular team meetings
- Regional examiner organizations
- Telemedicine
- Consultation
- Feedback, changes, accountability and acknowledgement must be documented

SART Quality Assurance

Feedback from Community Team Members

- Law enforcement
 - Notification
 - Response times
 - To victim
 - To exam site
 - Interactions with
 - Examiner
 - Exam facility staff
- Prosecutors
 - Examiner performance
 - Timely response
 - Pre-trial conference
 - Testimony (competency and accuracy)
 - Legal outcomes



Patient Satisfaction Surveys

- Who does these?
 - At advocacy follow up?
 - Written surveys at time of exam?
 - Written surveys to mail in?
 - Follow up phone calls?
 - When is the best time to assess?
 - What do we learn?
 - What do we do with the results?

Evaluation of Outcomes An Essential Component of Quality Assurance

- Patient outcomes
 - Medical issues
 - Emotional impact and recovery
- Criminal justice outcomes
 - Epidemiology of reporting and exams
 - Investigated cases referred to prosecution
 - Cases filed by prosecutors
 - Convictions and successful plea negotiations
 - Analysis of “unsuccessful” cases

- Victim Advocates
 - Notification by Law Enforcement
 - Interactions with
 - Law enforcement
 - Examiner
 - Patient’s experience (via advocate as proxy)
 - Observation of confidentiality privilege
 - Private time with patient
 - Conflict resolution
- Crime Lab
 - Quality of evidence
 - Forensic procedural issues
 - Legibility and completeness of the form
 - Insufficient or inadequate evidence collected based on criminalist review of forensic exam form
- Feedback on SART issues
 - Need for further data or investigation
 - Personal
 - Immediate—phone call
 - Face-to-face meetings
 - Group
 - Amended documentation
 - Policy or system implications
 - Individual remediation / training

Who Defines SART Success?

- Is success measured by which member of the team you ask?
 - Patient-centered issues
 - Patient/victim
 - Advocate
 - Criminal justice issues
 - Law enforcement
 - Prosecution
 - Examiners...broad perspective

SART success is...

- ...the existence of a multidisciplinary team committed to SART principles:
 - Psychosocial support and compassionate treatment from all involved
 - Professional investigation/ evidence management
 - Evidence-based medical forensic evaluation
 - Appropriate medical care and prophylaxis
 - Addressing the needs of the criminal justice system

Chapter 19

Forensic Laboratory Testing

Rebecca Hierholzer, MD, FACEP

Forensic—relating to, used in, or appropriate for courts of law or for public discussion or argumentation; from the Latin *forensis*—public, of a forum.

The cornerstone of forensic science is Locard’s exchange principle. This principle holds that every contact leaves a trace. When a perpetrator enters a crime scene, he leaves something there, and when he leaves, he takes something with him. This is the basis for the forensic portion of the sexual assault examination.

Collection and preservation of evidence should be done in such a way that the evidence is in the same form when it arrives at the laboratory as it was at the crime scene. Add nothing, subtract nothing. The exception is that wet stains or samples should be air dried.

In sexual assault, there are at least **two crime scenes**: the **patient** and the **place of the assault**.

Quality begins at the crime scene. As there is only one chance to collect most forensic evidence, one should carefully consider the patient’s description of the assault prior to examination to ensure that the examination is thorough and that specimen collection is complete and accurate.

Individual states and jurisdictions may have varying requirements for documentation and evidence collection. Check with your state and local crime labs for further details.

General Rules for Forensic Evidence Collection (Module—Adult/Adolescent Patient)

The examiner must be careful to prevent evidence transfer (contamination). This is prevented by changing gloves whenever cross-contamination can occur. The exam room or area must be cleaned and exam paper must be replaced between exams. Clearly document all findings and any deviations from procedures.

- All wet/moist collections should be air dried (heat and moisture may degrade evidence); any residual or ambient moisture is addressed with desiccants and/or refrigerating/freezing samples
- If once living, such as blood and body fluids, refrigerate
- Do not use plastic bags; use paper bags and capped plastic containers with desiccant tabs. If desiccant tabs are unavailable, ensure that law enforcement is aware that samples may need to be dried
- Label, seal, and initial everything; complete a chain of custody form. Do not lick envelopes to moisten
- Place items in separate bags or containers so there is no transfer of trace evidence
- Use gloves or plastic forceps to touch items that may contain fingerprints (knife, gun, bullet, cartridge case, etc.); package to preserve prints
- Suspect’s DNA from epithelial cells has been found in the vaginal vault of patients for as long as 3 weeks (Module—References) and on clothing for years
- Buccal swabs may be collected as the patient’s biological DNA standard in lieu of a blood standard
- Collect wet samples without water if possible; dried specimens should be obtained using the double swab method (previously described in the Bite Mark Chapter of this publication)

- Swabs should be dried prior to packaging. There are commercially available swab driers at multiple price points. Alternatively, swabs can be placed upright in a block of modeling clay or an inverted Styrofoam cup (disposable and easily available). Swabs should be labeled prior to being placed in the swab drier.
- Sterile collection is not necessary (*sterile* refers to the absence of microorganisms; DNA is neither bacteria nor virus); however, it is necessary to change gloves, replace paper platforms, and use disposable tools between sites to avoid cross-contamination.

Core evidence collected is determined by the patient's history of the events; this may consist of scrotum, breast, neck, penis, abdominal, genital, perianal, and rectal specimens.

Evidence collection changes as technology changes. Consult your local forensic laboratory and work with their scientists to ensure that the evidence you collect is feasible to test and that your protocol is in step with the newest technology and collection practices.

Evidence Collection Kits

Evidence collection kits are commercially available from several sources (for example, TriTech and Sirchie). In the event that a prepackaged kit is not available, evidence can be collected utilizing supplies readily available in most emergency departments. Recommended supplies include:

- Sterile cotton swabs
- Blood tubes
- Sterile urine cups
- Evidence tape
- Paper bags of varying sizes
- Paper envelopes of varying sizes or paper to use as bindles

Use and Quality Control of Desiccant Packs¹

Multiform desiccant packs are used to dry swabs that have been used to collect biological evidence; this includes items such as blood, semen, and saliva stains. The desiccant rapidly dries the sample so as to prevent microorganism growth and sample degradation.

If desiccant packs are used, follow all manufacturer's recommendation for storage, use and quality control.

Reference

1. Wilson JT. Desiccant drying of physiological fluids. Presented at Midwestern Association of Forensic Scientists, Kansas City, MO, 1991.

Chapter 20

Cultural and Linguistic Aspects of Sexual Assault Care

Michael L. Weaver, MD, FACEP

Introduction

Our country and indeed our health care systems are becoming increasingly diverse. Patients and providers present from a variety of culturally and linguistically different backgrounds, which can have a significant effect on various aspects of health and health care. As a consequence, health care providers have found it more challenging to provide safe, quality, efficient, effective and equitable patient care outcomes (IOM 2003).^{*} As emergency physicians, we can consciously or unconsciously affect the perceptions, behaviors and satisfaction of our patients, which can contribute to health care disparities. Not surprisingly these changing demographics also impact the forensic subset of patients that are victims of gender-based violence.

Cultural and linguistic discussions, even narrowly focused around sexual assault issues, are too expansive for any single review. However we need to be knowledgeable about how these competencies can have a significant impact on our patients. Most diversity/inclusion educators feel it is better to provide general concepts about cultural sensitivities, respect, competency which can be broadly applied rather than focus on a list of generalities about behaviors of any specific culture e.g. race/ethnicity, age, sexual orientation, persons with disabilities, etc. Again, such an approach would be beyond this summary. Instead, this review will be divided into four parts. We will discuss important background cultural and linguistic information that sexual assault forensic examiners (SAFEs) and medical directors of SAFE programs should be knowledgeable about the medical forensic examination (MFE). Then we will discuss some specific concepts to be applied during and after a MFE, and conclude with a summary of seven recommended universal principles.

I. Pre-Medical Forensic Exam Background Considerations

a) Definitions

There has been an explosion of terminology in the literature around cultural aspects of care (e.g. ethnocentrism, cultural congruence ethnopharmacology, etc). The definitions of cultural and linguistic competence have also evolved over time. Most recently, Bentancourt JR, and Green AR (2010) from the Disparities Solution Center- Massachusetts General Hospital, have defined clinical cultural competence as "the ability of health care professionals to communicate with and effectively provide high-quality care to patients from diverse sociocultural backgrounds." This definition is gaining wide acceptance. The National Center for Cultural Competence has defined linguistic competence as "the capacity of an organization and its personnel to communicate effectively, and convey information in a manner that is easily understood by diverse audiences including person of limited English proficiency (LEP), those who have low literacy skills or are not literate, individuals with disabilities, and those who are deaf or hard of hearing." (Goode T., Jones W. 2009).

Although many speak of cultural and linguistic competence...in reality most acknowledge that "competence" can never be actually achieved as one could never be truly competent in all aspects of a culture or communication skills. These types of discussions are generally considered part of a life long journey where clinicians continually strive to provide what should be better identified as culturally and linguistically "appropriate care or services." These concepts are also applicable to care for adult and adolescence victims of sexual assault. Their vulnerability enhances the need for culturally and linguistically appropriate health care services.

b) Regulations, Licensure and Guidelines/Standards

(At 0200 hours on a Saturday night, you get a call from EMS that they are bringing in a patient who is confused, doesn't speak English but friends feel she may be a victim of a drug-facilitated sexual assault. The paramedic specifically recalls that a couple of the bystanders at the party repeating the words "intoxicado." Neither paramedic spoke Spanish, but on arrival told the ED physician that the patient was a drug overdose.

Rather than calling in a Spanish interpreter, the decision is made to let her “sleep it off” and do a better examination later in the morning when she can consent. She was admitted for observation and 48 hours later she was noted not to be using her arms and legs. CT head revealed ruptured aneurysm, she became quadriplegic and successfully sued for 71 million dollars! In Cuban culture “intoxicado” is a broad term that means that you got sick after eating something...not drug or alcohol intoxication.)

This case (which in reality involved a male that was not sexually assaulted) is indicative of what can happen when limited English proficient (LEP) patients are not provided interpreter services as actually required by Title VI of the Civil Rights Act of 1964 and part of the Culturally and Linguistically Appropriate Service (CLAS) standards available at: <http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=15> (OMH 2001).^{*} As a federal law, emergency physicians should understand that failure to provide an interpreter is not covered by malpractice insurance if an adverse outcome or complaint occurs.

i. *Regulations*

This is just one example of the multiple cultural and linguistic regulations of which we as emergency physicians must be aware. And it’s important to note that it is our responsibility to offer (and document) interpreter services free of charge. It is not the patient’s responsibility to inquire. Medical interpreters are qualified professionals trained to respond to the patient’s interpretation needs in any number of traumatic, tragic, or difficult situations. In some instances interpreters may have not had specific training/education in gender-based violence, but still they should be utilized for interpretation.

ii. *Licensure*

Several states (New Jersey (6 hours of CME), California, Connecticut, New Mexico and Washington) now have laws requiring cultural competency training for physicians as a condition of medical licensure. Five other states (Arizona, Kentucky, New York and Ohio, and Oregon) have pending legislation. However, Georgia, Illinois, Iowa, Florida and Colorado have failed to adopt criteria.

iii. *Guidelines/Standards*

Many national entities and organizations, including Institute of Medicine (IOM 2003),^{*} The Joint Commission (TJC 2010),^{*} the National Committee for Quality Assurance (NCQA 2006–2009),^{*} the National Quality Forum (NQF 2005), Health and Human Services, Office of Minority Health (OMH 2001), AMA, NMA, NHMA (The Commission to End Healthcare Disparities 2009), AAMC (2006), LCME (2002) and ACGME (2009) have published guidelines or standards regarding cultural and linguistic health care services. Such a broad cross sector of endorsements validates the importance of this health care initiative.

c) *Medical Forensic Examination Documentation Forms*

Forms utilized as part of the MFE will contain medical and legal terminology that in many circumstances will be challenging for our patients (e.g. consent forms, reference samples, evidentiary exam, and prosecution). As part of linguistic competency, we need to be aware of the impact literacy and health literacy levels play in our cross cultural patient encounters.

i. Communication challenges are the leading root cause of sentinel events, defined as unexpected occurrences involving death or serious physical or psychological injury, or the risk thereof (TJC, Dec 2006).

ii. Research has shown that in 2003, 43% (93 million) of adults are either at or below basic literacy skills level. (National Center for Education Statistics, 2006).

iii. The Institute of Medicine, Agency for Healthcare Research and Quality (AHRQ) and the AMA each release reports that as many as 50% of all Americans adults lack the basic reading and numerical skills essential to function adequately in the health care environment (Aldridge, 2004; Institute of Medicine, 2004; Weiss, et al. 2005).

iv. Emergency department instructional materials average 10th grade readability which is out of readable range for most of our patients (Duffy & Snyder, 1999; Lerner, Jehle, Janicke, & Moscati, 2000; Williams et.al.1996).

v. Most health education information is written above an 8th grade level and the average is between 10th and 12th. Although the average American reads at the 8th grade level, millions read at lower levels and need materials written at the 5th-grade level or lower (Bastable, Chojnowski, Boldberg, McGurl, & Reigel, 2005; Brownson, 1998; Doak et al., 1998; Davis, Williams, Marin, Parker, & glass, 2002).

As SAFEs or medical directors of SAFE programs, it is important to review all documents with your risk

management department, interpreter services, advocates, and other members of your Sexual Assault Response and Resource Team (SARRT) team to assure that consent for evidence collections, privacy, photography, medical treatment options, examination procedures, and instruments is clearly understood.

d) *Preparation*

No matter what your culture, all patients want to feel that their provider is knowledgeable, competent and prepared to take care of them. This provides an extra challenge for the gender-based violence patient because resources may not be frequently utilized and the SAFE unprepared. Much like the code cart, the room designated for the SAFE should be routinely checked for various speculum sizes, camera batteries, flash cards, extra forensic packets, clothing, etc. There should also be back up accommodations for persons with disabilities and a phone with a speaker or computer on wheels if remote interpreter services are needed.

e) *Personal and Professional Prejudgment*

Before beginning any encounter, we must all first acknowledge that we have hidden preconceived attitudes and beliefs about our patients. Culturally and linguistically appropriate care cannot occur until we recognize those prejudgments and how they influence our behaviors, potentially adversely affecting our delivery of care.

Instead of seeing the patient as someone who places themselves in dangerous situations, drinks too much, is addicted to illegal drugs, or dresses as a “sex worker” and letting that perception affect our care, our focus should only be that we have a patient that is in urgent need of our medical forensic expertise. We should provide professional care without actions that could lead to the perception of bias or prejudgments.

Culture and linguistics also affect us as providers within our team of professionals responding to gender-based violence. If we take an honest look at our SARRT members, we can see a variety of culturally based verbal and nonverbal professional prejudgments, or “ism” (similar to racism, sexism, or ageism) that can create a climate of mistrust. Although not applicable to everyone, listed below are some problematic stereotypes that do occur.

Emergency Physicians—Professional “isms.” Some feel that emergency physicians are ‘adrenalin junkies’ looking for the next GSW or serious MVC to come through the door. As such, they don’t feel they should have to provide compassionate hand holding discussions with sexually assaulted patients. However, at the same time, they don’t want ED nurses to be able to evaluate and treat sexual assault patients independently.

SANEs—Professional/gender “isms.” Some feel that sexual assault is a nursing, and more specifically, a female nursing issue. Doctors and male nurses should not be involved.

Advocates—Suspicious “isms.” Some feel that only advocates have the patient’s best interest at heart and everyone else has hidden agendas that may not be patient centered.

Crime Lab Personnel—Evidence “isms.” Some feel that even if there is a <1% likelihood that a plucked hair might be utilized, they steadfastly request that 25 pubic/head hairs be obtained. Even in consent cases!

Law Enforcement Personnel—Real Rape “isms.” Some are only happy when the CSI TV stereotype of sexual assault occurs. They want cases where the patient has visible injuries. In those cases it is clear at the outset that a crime has been committed and therefore easy to believe; compared to the ‘he said/she said’ consent cases where a more intense investigation must be conducted.

Prosecutors—Winnable Rape “isms.” Some want to only prosecute the cases that do not involve drugs or alcohol—which paradoxically are involved in the majority of sexual assault cases—so that they don’t have to do the extra work to convince a jury that the victim is still credible.

As part of our cultural journey, we need to recognize that these biases exist and appropriately manage them during our cross cultural interactions with each other and our patients.

II. Medical Forensic Examination Considerations

a) *Culture*

All of our patients present with their own individual cultural backgrounds. We can never know all of the nuances that will impact their care, but here are a few general points that you as a SAFE or medical director of a SAFE program should consider during the exam.

i. The SAFEs should not be perceived as being hurried or having other priorities. This is a big challenge for emergency physicians and one reason that collaboration with a SANE program is best practice.

- ii. If using on call SAFEs, they should appear professional. No flip flops, white coat thrown over unprofessional clothing, tobacco smoke smell or gum chewing.
- iii. Monitor your patient's behavior. Some will want to move quickly through the exam while others, perhaps elderly patients, will need a pause for each step.
- iv. Any laughter, loud noises, loud talking or knocking on the door can be disruptive or even traumatizing to the patient. If possible, the zone in which the exam is taking place should be maintained as a quiet area. A white noise machine can help to mask some of these environmental distractions.
- v. SAFE's gender is usually not an issue unless specifically brought up by the patient. Male examiners have had the same patient satisfaction rates as female examiners in many programs and in some cases to be cared for by a competent, compassionate and caring male provider may minimize post sexual assault "male phobias." Muslim patients are also mentioned in this regard, and it is important to note that in the Quran, there are emergency exceptions when it is permissible for a male to touch a female.
- vi. Advocates should always be called for supportive care during the exam. However, much like interpreters, most have not had any cultural and linguistic competency education. You should assure that all members of your SARRT acquire this knowledge.

b) Linguistics

As with culture, this will have an important impact on your cross cultural encounter with your patient. The terminology we use to communicate with sexual assault patients is critical and it begins when you enter the room. Here are some considerations during a MFE for SAFEs and their medical directors.

- i. Make sure you professionally address your patient when you enter the examination room. No "honey" or "sweetie" or use of the first name without the patient's permission.
- ii. Make sure terms that you use are appropriate and clearly understood. Depending on the generational culture of your patient, "the clap" or "VD" may be better understood than "STI."
- iii. Ask permission to proceed with next steps throughout the exam.
- iv. Avoid "the language of consensual sex." If the patient says "we had sex" or "we had oral sex" it is appropriate for you to get clarification as to exactly what they mean happened. "Did he force his penis in your mouth or vagina?" Much like any other detailed history, this conveys a different picture to the jury, especially in consent cases.
- v. It is essential to use an interpreter if your patient is limited English proficient (LEP) and the interpreter have training about culturally and linguistically appropriate services.

III. Post Examination Considerations

a) Discharge Instructions

Specifically because many sexual assault patients are lost to follow up, it is essential that their discharge instructions be clearly understood. One method, "teach back," recommended by NQF (2005) is an important tool that should be utilized if there are comprehension concerns. A few additional points should be noted.

- i. Working with an interpreter is essential at this stage, as important and time sensitive follow up medical, law enforcement, advocacy, and privacy issues must clearly be understood.
- ii. Socioeconomic status (SES) plays an important role in cultural and linguistically appropriate care. If you are not providing actual medications, you should make sure your patient has the funds to purchase them. This is especially important in high risk HIV exposure cases. You (along with the advocate) should also inquire about their access to transportation to a pharmacy, to follow up advocacy, or back to the hospital.
- iii. Although males are a minority of sexual assault cases, you should also inquire about specific male advocacy services. Most advocacy centers are intimidating for male survivors to even approach, because all their literature, pictures, etc. discuss or depict only females and they may not have male advocates.

IV. General principles of cultural and linguistic care

As noted initially, it is impossible to be knowledgeable of all the cultural and linguistic issues that may impact the care of any individual patient. However "Weaver's 7 Principles for Culturally and Linguistically Appropriate Care" are recommended for every cross-cultural patient encounter.

First, manage your own prejudices. Recognize that **everyone** carries conscious or unconscious biases that can negatively impact the patient's experience and therefore their ability to provide high quality equitable care.

Second, understand that every patient is multicultural. Providers should understand that each patient brings a unique blend of cultural and linguistic considerations that go beyond their cultures of race and ethnicity, and include age, educations SES, religion, geographic location, etc. (*Providers should anticipate the need to approach a 45 year old, uneducated, Baptist, European American that has been a victim of sexual violence in rural Mississippi much differently than a 23 year old, African American, Catholic, attending Harvard Law School in Boston.*)

Third, generalize but don't stereotype. The difference is somewhat subtle, but a generalization is similar to the beginning of the conversation where all possible conclusions are remain open for consideration. Stereotyping is more like the end of the conversation; you have formed your conclusion and there's no need for further discussion. (*For instance, alcoholism is more prevalent in the American Indian community so you should ask an American Indian patient who has been a victim of GBV about their alcohol consumption. But just assuming that an American Indian patient is an alcoholic or was drunk at the time of their GBV without asking would be stereotyping and unacceptable.*)

Fourth, follow the Platinum Rule. Unlike the Golden Rule "Do unto others as you would have them do unto you. Matt 7:12." Culturally and linguistically appropriate care is about providing the type of care preferred by each individual patient, or what is now more commonly referred to as 'patient centered care.' The Platinum Rule is "Do unto other as they would do unto themselves." It's not about what you want, it's about what your patient wants and feels is appropriate.

Fifth, "evidence based care" is only as good as the diversity/inclusion within the research and must always be balanced with individual patient and family centered principals of care.

Sixth, when in doubt, ask the patient. "What would you like me to call you?" "Are you ready to proceed?" "May I touch you?" "Do you have any questions about what we are going to do next?" Asking a question is always preferred rather than proceeding with an action, such as touching someone's hair, which may be objectionable, disrespectful and jeopardize completion of the MFE.

Seventh, "Start By Believing!" This campaign started by End Violence Against Women International, emphasizes one of the greatest challenges our society has in bringing justice to victims of GBV. Only about 18% of sexual assaults are reported in the U.S. (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007), and fear of not being believed is one of the cultural and linguistic barriers patients have to seeking care. GBV patients need unconditional support and encouragement from the beginning if they are to access the healthcare, criminal justice and advocacy services they deserve. It is critical for SAFEs to understand, that similar to providing care for patients that present complaining of a headache, their primary purpose is not to try to prove if the complaint is valid...but to believe them, support them and provide the best, high quality, equitable patient care experience they can.

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Chapter 21

Special Populations

Heather V. Rozzi, MD, FACEP

Elderly Victims

Incidence

- Difficult to estimate incidence
 - underreporting
 - dependence upon caregiver
 - sense of loyalty or allegiance to perpetrator
 - lack of opportunity to report
 - fear of retaliation
 - varying definitions of “elder” in research
 - alterations in mental status
- Although elder mistreatment is more likely to occur in a home setting, sexual abuse of the elderly is more likely to occur in an institutional setting.
- Approximately 1% of substantiated elder abuse cases involve sexual assault.

Special Considerations

- Elderly female victims of sexual assault are more likely to sustain injury as a result of decreased estrogen levels.
- Bruising often incorrectly attributed to aging process, medications, or to injuries sustained during routine care.
- Memory impairment may hinder reporting, cooperation with investigation, and getting appropriate follow up.
- Hearing impairment and physical limitations may make the medical forensic examination somewhat challenging.

Victims with Physical and Cognitive Disabilities

Incidence

- Children with disabilities are 3.7 times more likely than non-disabled children to be victims of any sort of violence, 3.6 times more likely to be victims of physical violence, and 2.9 times more likely to be victims of sexual violence.
- Children with mental or intellectual impairments appear to be among the most vulnerable, with 4.6 times the risk of sexual violence than their non-disabled peers.
- Adults with disabilities are 1.5 times more likely to be victims of violence than those without a disability.
- Adults with mental health conditions are at nearly four times the risk of experiencing violence.
- Developmental disability increases risk of sexual assault 4–10 times above rest of population; perpetrators most often caretakers.

Special Considerations

- In cases of cognitive disability, there may be issues regarding consent.
- For hearing impaired patients, use interpreters with experience regarding sexual violence.
- In cases of physical disability, ask what assistance a patient may require during the examination, and provide assistance only with permission.

Lesbian/Gay/Bisexual/Transgender Victims

Incidence

- Little is known about the incidence of sexual violence in the LGBT population.
- Approximately 1 in 8 lesbians (13.1%), nearly half of bisexual women (46.1%), and 1 in 6 heterosexual women (17.4%) have been raped in their lifetime.

- Nearly half of bisexual men (47.4%), 4 in 10 gay men (40.2%), and 1 in 5 heterosexual men (20.8%) have experienced sexual violence other than rape in their lifetime.
- About 50% of transgendered people report unwanted sexual activity.

Special Considerations

- LGBT victims often do not seek help due to concern about possible homophobic responses from medical and law enforcement personnel.
- These patients may be concerned about being “outed.”
- Transgendered patients may have concerns about lack of understanding/experience or fear of judgment by healthcare providers regarding their transitioning/transitioned anatomy.
- Be aware of community resources for LGBT patients.

Prisoners

Incidence

- An estimated 9.6% of former state prisoners reported one or more incidents of sexual victimization during the most recent period of incarceration in a jail, prison, and post-release community-treatment facility, according to a recent Bureau of Justice Statistics (BJS) survey of Federal and State inmates.
- About 5.4% of former state prisoners reported an incident involving another inmate, and 5.3% reported an incident involving facility staff.
- Rates of sexual victimization did not vary based on commonly cited characteristics of facilities, including size or age of facility, crowding, inmate-to-staff ratios, or gender composition of staff.
- Obstacles to reporting include fear of reprisals, embarrassment.

Special Considerations

- The forensic examiner should not ask the custodial officer to step out of the room during the exam.
- No restraining devices should be removed or modified without consulting with accompanying law enforcement.
- Consent should be obtained for each portion of the forensic medical exam as it would be for any other patient.
- Although local practices may vary, if a corrections officer is the accused perpetrator, a different law enforcement agency may need to conduct the investigation.

Intoxicated or Unconscious Patients

Special Considerations

- Patients are unable to give consent for forensic examination if intoxicated or unconscious.
- Hospital policies vary; discuss with your hospital’s Risk Management.
- If patient’s mental status is expected to return to normal rapidly, may defer forensic examination until the patient is able to give consent.
- If the patient’s power of attorney is present (and not a suspected perpetrator), they may provide consent for the forensic examination.
- Due to the limited time window in which evidence may be collected, if there are no family members present and the patient is unable to provide consent, a medical forensic examination may be completed and the kit stored until the patient is able to consent to release to law enforcement.
- If the patient is not expected to regain normal mental status, law enforcement may request a court order to obtain the kit and associated documentation.

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Chapter 22

Suspect Examination

Mary Carr, MD

Forensic examination of individuals suspected of sexual assault is rarely utilized in the investigation of sexual assault. However, depending upon the type of contact, perpetrators may be more likely than victims to have probative evidence on their bodies and clothing. This is especially true in cases involving oral copulation of the suspect and digital penetration of the mouth, vagina, or rectum. The importance of the suspect exam is not only DNA identification, but also the location of the recovered DNA evidence and the presence of injury or unique identifiers of the suspect, which may corroborate the history given by the patient.

SARTs/Hospitals should develop standardized protocols, instructional guidelines, and documentation for the forensic examination of suspects. This should be done as a collaborative effort between law enforcement, forensic medical personnel, and prosecutors. All details of the suspect exam should be worked out ahead of time.

Payment

Payment for suspect examinations does not fall under the victim reimbursement federal mandate. A suspect exam should be considered an additional expense associated with the investigation and as such it is reasonable that costs may be recovered from victim compensation programs, the suspect upon conviction, or from the investigating law enforcement or prosecuting agency. Because there is no medical indication for the evaluation, health care insurance cannot be billed for the exam.

Documentation

Results of the suspect exam should be documented on a specific “suspect-examination” form. The medical facility needs to decide if the suspect exam will or will not be part of the person’s medical record. If it is not part of the person’s medical record, then programs need to establish an alternative method of record storage, be it at the police department or under lock and key as part of the medical forensic program. Discussion with law enforcement and prosecution should occur in order to determine a reasonable length of time to maintain these records.

Evidence Kits

Evidentiary kits are often supplied by law enforcement or the crime lab that analyzes the kit. The same type of evidentiary kit used for victims can also be used for suspects. If a program desires they may also compile a kit specific to suspect examinations. Commercial suspect specific kits are available from several forensic supply companies.

Facility

If forensic examination of suspects is conducted in same facility (and perhaps by the same examiner) as the forensic examination of victims, care must be taken to avoid cross contamination. Different rooms should be used and the examiner needs to change gowns and gloves and wash hands well between exams, and document they have done so. It is preferable that two separate examiners should be used. Alternative sites to conduct the examination includes the police station or the jail. Privacy should be maintained.

Consent

Forensic examination of suspects presents unique issues regarding consent. In some cases, examinations may be obtained from suspects who have consented to the examination and collection of evidence. More commonly, a court order or warrant may have been issued for the collection of specific pieces of evidence. In some jurisdictions, being under arrest is enough to compel a suspect exam. This part of the process should be clearly worked out by all agencies prior to doing any suspect exams.

If a suspect is voluntarily submitting to evidence collection, consent should be obtained in the same manner as for a victim. The suspect will need to be informed of any and all evidence that will be obtained. The suspect has the right to decline portions of the examination and to abort evidence collection at any time.

If evidence is being collected with a court order, the suspect may not refuse the examination. Only evidence listed in the warrant may be collected. Because the forensic examiner is acting as an agent of the investigating officer, a Miranda warning must be provided prior to the examination. Both the law enforcement officer and the forensic examiner should document any spontaneous statements made by the suspect during the exam.

Unlike the victim exam, law enforcement will need to be present at all times during the suspect's exam. Occasionally a suspect is uncooperative during the exam and becomes aggressive or hostile requiring the use of restraints. It is the duty of law enforcement, not medical personnel, to restrain the individual.

If the suspect does not invoke his right to remain silent the forensic examiner should obtain a medical history, including information on anal or genital injuries, surgeries, or procedures that may affect the interpretation of examination findings.

Examination

Prior to the exam, the SAFE should have a detailed conversation with the officer or detective regarding the details of the assault as it is not appropriate to ask the suspect for details. This history will be used to direct the SAFE to areas to pay attention to and potential areas to obtain specimens from. As during a victim exam, the examiner should document vital signs and a brief medical history.

A head to toe assessment should be performed. Areas of pain or tenderness and visible injuries, birthmarks, tattoos, etc, should be described using written documentation, photography, and/or body diagrams. A reference DNA sample, usually a buccal swab, should be obtained. The examiner should collect trace evidence, such as grass and soil, as it may link the suspect to a crime scene. Penile identifiers such as scars, tattoos, warts, and color variations should also be documented. In cases in which no previous intimate relationship existed between the two individuals, this information may add credence to the allegation that a sexual encounter occurred.

The body of published studies evaluating suspect exam evidence collection, including areas most likely to yield results and the time course of evidence degradation, is still in its infancy. This is in part due to the paucity of programs participating in suspect evidence collection. The Oakland, Calif., program, one of the best established programs in the USA, still only performed an average of about 10–12 suspect exams per year.

Current literature supports the following bodily areas of the suspect as being most likely to yield victim DNA: the glans penis, the shaft of the penis, the base of the penis and the scrotum. Swabs from each of these areas should be collected separately as opposed to a single swab of the entire area. Fingernails should be swabbed especially in cases that include digital penetration of the mouth, vagina and /or rectum of the victim. The fingers most apt to yield evidence are the thumb, index and long fingers. Victim DNA from under fingernails has been collected up to 18 hours after the assault even with hand washing. DNA from the penis has been collected up to 28 hours after the assault.

All evidence collection should follow standardized forensic sample collection protocols. All swabs should be allowed to dry, be labeled, and packaged according to local protocols. Chain of custody must be maintained at all times. Care should be taken not to store the victim's kit with the suspect's kit.

In summary, forensic examination of a suspect in a sexual assault case can yield valuable information placing the suspect at the scene and supporting the allegation of sexual contact. This is especially important when the victim's exam has low yield. While the evidence may not prove a lack of consent, it may be probative or informative in value and is likely to assist with the prosecution of a difficult to prove crime.

Resources

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Suggested Suspect Exam Protocol

- A. Obtain consent from suspect, or if applicable, review search warrant/court order and what has been authorized to be collected.
- B. Obtain pertinent history from law enforcement
 - a. Date, time, and location of assault
 - b. Victim's account of assault
 - i. Injuries potentially inflicted on suspect
 - ii. Bite marks and any injuries
 - iii. Acts committed
 - iv. Victim menstruation status
 - v. Identifying characteristics of suspect
- C. Brief medical interview, if suspect cooperative
 - a. Medical history
 - b. Allergies
 - c. Current medications
 - d. Recent urogenital or anogenital conditions
 - e. History of vasectomy
- D. Take overall photograph of suspect
- E. Collect suspect clothing
- F. General Physical Assessment
 - a. Weight, height, hair color, presence of hair color, eye color
 - b. Vital signs
 - c. Note demeanor, affect, speech and coordination. Also record suspect handedness
 - d. Note any signs of intoxication
 - e. Note tattoos, scars, birthmarks, or piercings
 - f. Look for trace evidence in suspect's hair or on their body
 - g. Note any needle marks
- G. Scan entire body with UV light or alternative light source and collect areas of positive fluorescence
- H. Photograph all nongenital trauma and any identifying marks
- I. If bite mark is present: photograph, collect swabs using the double swab technique, and consider forensic odontologist consult
- J. Collect oral swabs, if indicated. Also note oral cavity
- K. Fingernail scraping/swabbing/cutting, if indicated. (digital penetration)
- L. Genital examination
 - a. Collect any matted pubic hair
 - b. Comb pubic hair
 - c. Inspect genitals for injury or foreign materials
 - d. Collect swabs, as indicated (within 24 hours of assault)
 - i. Glans penis
 - ii. Shaft of penis
 - iii. Base of penis
 - iv. Anterior scrotum
 - v. Under foreskin, if uncircumcised
 - vi. Anal swabs, if indicated
- M. Document all objective findings
- N. Consider patient need for medical evaluation
- O. Dry specimens, package, and label per local protocol
- P. Sign kit over to law enforcement officer

Chapter 23

Testimony

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Sexual assault examiners are used in court as witnesses and as expert witnesses to describe the physical examination of the victim and to present their examination findings. High-quality performance in court depends on the appearance of the sexual assault examiner as an unflappable, well-prepared expert who is able to explain and teach his/her findings to the judge and jury. For the sexual assault examiner, as for any witness, emanating that confident demeanor in court includes maintaining eye contact with the questioning attorney, judge and jury members to make sure that they hear and understand you well, speaking at a moderate pace, dressing appropriately for court and conveying evidence by working in concert with the examining attorney. The section which follows will describe some basic ways of achieving this kind of performance.

Order of Events

A basic understanding the order of events usually involved in trying a sexual assault case is helpful in allowing the sexual assault examiner to be well prepared for testimony. Although this sequence can vary significantly between jurisdictions, what follows is a general outline.

1. The crime is reported.
2. The victim and/or information/findings obtained by the witnesses are interviewed by police and an assailant is accused, or the police work in concert with crime scene investigators and/or sexual assault examiner to determine the identity of the assailant.
3. Charges are filed against the accused perpetrator. The nature of the charges is based on type of crime committed and the weapons involved in perpetration of the crime (if any). Use of a weapon influences the “degree” of crime and the resultant penalty. (Each charge against the accused will eventually need to be substantiated in court. Failure to prove a charge will mean failure to convict on that charge.)
4. The perpetrator is accused, or indicted. This means that the charges against the assailant are reviewed, found credible and confirmed. In some jurisdictions this process is completed by the district attorney. In others it is done by a grand jury made up of community members.¹ The purpose of indictment is to avoid if possible the leveling of incorrect charges or the wasting the court’s time with charges which cannot be substantiated. The accurate and intelligible documentation of injuries by the sexual assault examiner is integral to this process. Most important in many sexual assault cases is for the prosecution to prove that the victim did not consent to the sexual encounter.²
5. The accused assailant is arrested (this often occurs before formal indictment, however the accused can only be held for a finite amount of time and must be freed unless indictment occurs promptly).
6. The assailant is called, or arraigned, at a preliminary hearing. This means that the accused perpetrator comes to court to be formally advised of the charges against him/her. At this hearing, a judge hears brief testimony, most often from the victim, and makes sure that legal requirements to go forward with the case are met³.
7. Proof of the charges is gathered. This proof usually includes the sexual assault examiner’s documentation of their patient interview, physical exam and evidence gathering.
8. A court date is scheduled and a jury is selected.
9. Witnesses are subpoenaed by the defense and prosecuting attorneys. Receiving a subpoena means that you are required by law to appear in court for the purpose of giving testimony. The subpoena will be headed by the name of the state versus the name of the defendant, and will tell the location of the court and the date(s) upon which you will be required to appear.

10. Prosecuting and defense attorneys review and organize the evidence and prepare witnesses for what will occur in court. Qualifying of expert witnesses should happen during this time. If you are to be used as an expert witness the examining attorneys will need your resume/CV, which should include descriptions of your training, past and present employment, number of sexual assault examinations performed with another practitioner and independently, publications, and trials in which you have given testimony. Your record of experience will aid the attorneys in establishing your credibility, and all of your information will be submitted to the opposing attorneys for their examination as well. Errors and inconsistencies in your resume/CV will be found and exploited if possible by the opposing attorneys. Expert witnesses are questioned extensively by both the prosecution and defense, and may be disqualified if found to be unsuitable.
11. Trial occurs, involving presentation of evidence by prosecuting and defense attorneys and testimony by witnesses including sexual assault examiners.

Preparation for Trial

The witness or expert witness will achieve their best performance in court by working in concert with the examining attorney. To do this, meeting with the attorney at least once but preferably several times well before the trial is essential. Not only may these meetings reduce the considerable stress that the witness may feel in court, but it is during these meetings that the attorney and the witness will establish their method of teamwork. The attorney should make the structure of the presentation clear to the witness, and should rehearse as many questions and answers with the witness as possible. This rehearsal helps the attorney hone his/her questions so that they elicit as much information from the witness as possible in an organized way. It also helps the witness anticipate what questions will come next so that his/her answers logically flow from one to the next. Failure to prepare for trial often results in frustration between the attorney and witness because the attorney asks questions in such a manner that the witness does not understand what information is important to impart or because the witness answers each question independently and does not aid the attorney in painting a picture of the case as a whole. This frustration is evident to juries and can easily be interpreted as antagonism. It is almost invariably destructive to the case.⁴

Good preparation should include practicing answers to both direct examination questions and to anticipated cross examination questions. Anticipation of cross examination questions allows the attorney and witness to identify and anticipate weak points in the testimony and to improve upon them if possible by collecting more evidence or developing more thorough knowledge of the evidence already at hand.⁵

*The prosecuting attorney is also known as the district attorney, the D.A. or the state's attorney.

Personal appearance is another item which should be addressed well in advance of trial so that suitable clothing can be obtained as needed. If you are unsure of what is appropriate, dress in the clothing you plan to use for court when you meet with the prosecuting attorney(s) and solicit their input. Remember that part of being credible as an expert witness involves looking like an expert.

Arriving in Court

If you are testifying for the prosecution, a person designated as a Victim and Witness Advocate may be made available to you. This person can be very helpful in guiding you to the appropriate courtroom and orienting you to the courthouse and its surroundings. You should remember to ask them "convenience questions," which will become very important to you as your court appearance approaches. Find out where to park and how best to get to the appropriate courtroom. This may seem a simple item. However, you should recall that courthouses and their surrounds are notorious for complicated historical additions and modifications for modern security. Without this information, you can easily end up being late to court. Another important piece of information is where to sit in the courthouse to await your turn to testify. Often there is a place to sit which is away from witnesses, attorneys and the family of the opposing side and taking advantage of this location decreases your chance of pre-appearance awkwardness and stress. Should an opposing attorney find you, speak to them only as you would in a courtroom, as anything you say to them can and probably will be used in court. There is no such thing as "off the record" when speaking to an opposing attorney even though you are not physically in the courtroom. Should the opposing attorney hand you something to read just before your appearance, *you should not read it* as doing so can make you eligible for cross examination on a document which you have not had adequate time to review.⁶

During the Trial

Witnesses give testimony first under *direct* examination by the examining attorney, then under *cross* examination by the opposing attorney. During direct examination the examining attorney will first establish the witness' qualifications for the jury. Then the attorney will ask the witness a series of questions which solicit information about the case in a fashion which ideally is easy for the jury to understand, remember and apply. In the best situations, the attorney acts as a partner to the witness, helping the witness by drawing out, organizing and clarifying information. For their part of the partnership, a good witness will answer questions in a concise, confident and unbiased manner. To do this, the witness should have excellent recall of the information they are being prevailed upon to deliver so that their testimony is smooth and largely uninterrupted by referral to documentation. Preparation for functioning as a witness should be similar to preparation for a licensing examination, wherein as much of the pertinent information is committed to memory as possible.⁷

When presenting in court, you should speak loudly and clearly to make sure that no member of the jury has trouble hearing what you have to say. Watch the body language of the jury members to make sure that you are loud enough without shouting. If there is a microphone provided you should use it, and listen to your projection in the speakers to make sure that every syllable is captured by the device. Should you be asked to teach a point to the jury, you should address the jury, considering each of their faces for understanding and acknowledgement as you teach, just as you would in a classroom. When simply answering a question, there is no need to direct your answers to the jury. Instead, address your answers to the person who asked the question⁸. Although you should speak rapidly enough to convey confidence, there is no need to rush your speech. Take time in phrasing your answers to questions. If you speak incorrectly, correct yourself calmly. A well worded answer is easy for the jury to understand and remember. An erroneous answer left uncorrected can cause substantial damage to the case.

Sexual assault examiners may be used as *expert witnesses* by the prosecution to prove the accused guilty or by the defense to prove the accused innocent. If functioning as an expert witness, the sexual assault examiner should be prepared to describe their findings and observations during the physical exam as well as to explain any radiologic and laboratory findings. Expert witnesses may also be asked to express opinions on the validity and meaning of evidence. These opinions should be given if they are solicited by the examining attorney but should *never* be expressed in the documentation of a victim's injuries. Opinions on the guilt or innocence of the accused should also not be given as determining this is the job of the jury, not the witness.⁹

The witness should remain aware that during cross examination, the opposing attorney will make an effort to inspire doubt about the qualification of the witness and about the testimony which the witness has given. For this reason, witnesses should attempt to remember as much of what was said during their direct examination as possible. A crafty attorney can sometimes even lead a witness to give testimony which is helpful to the opposing side. Witnesses should pay even closer attention to questions asked by the opposing attorney than they did to questions asked by the examining attorney, and should ask for repetition or restatement of any question which seems unclear. Questions by the opposing attorney frequently require the witness to simply answer "yes" or "no" however they may contain slightly incorrect information or require speculation on the part of the witness. In such cases, the witness must remain patient, polite and even friendly in his/her demeanor. Antagonistic responses on the part of the witness are easily contorted by a skilled attorney to make the witness appear biased or ignorant.¹⁰ Answers to questions should be clear and brief and should correct any inaccurate information. Lengthy answers tend to lead to boredom and/or confusion on the part of the jury and are not appropriate for this portion of the trial. It is better to state that one is unqualified to answer a question (particularly if it requires an opinion!) than to create an answer which can later be used to cast doubt upon other testimony.¹¹ In addition, one should not generally answer a question that was not asked, even though it may be tempting to want to volunteer additional information.

Often attorneys use the device of a hypothetical question which adds or leaves out portions of evidence involved in the case. Witnesses should listen to these questions carefully, then answer them based upon as much scientific fact as possible. If the question does not align itself with facts already presented in the case, the witness should object and refuse to answer the question unless it is rephrased.¹²

Summary

The role of the healthcare provider involves documentation of patients' history and physical examination. As a forensic examiner, one must realize that this documentation may lead to support that a sex crime occurred and may help to identify the perpetrator. Remember WE are objective scientific practitioners of health care.

To successfully prosecute this kind of a case, the team of victim, law enforcement, and prosecuting attorney will need to present evidence that:

1. the sex act happened without the victim's consent,
2. force or threat of force was used,
3. the victim was intoxicated by drugs and/or alcohol and the assailant knew this, or
4. the victim suffers from a mental disability (for example dementia, brain damage or mental retardation) and so is incapable of giving consent.¹³

Although the input of the sexual assault examiner is more frequently solicited by the prosecution to prove the alleged assailant guilty, it may alternatively be engaged by the defense. Regardless of their eventual role, the sexual assault examiner should strive to complete a thorough, easily interpreted document describing their findings and to explain those findings in court in an unbiased and professional manner.

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Forensic Issues in Sexual Assault

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Resources

AEquitas: The Proecutors’ Resource on Violence Against Women
1100 H Street NW, Suite 310
Washington, DC 2005
202-558-0040
<http://www.aequitasresource.org>

American Academy of Pediatrics (AAP)
141 Northwest Point Boulevard
Elk Grove Village, IL 60007-1098
847-228-5005
800-433-9016
847-228-5097 (Fax)
<http://www.aap.org>

American Board of Forensic Odontology (ABFO)
c/o The Forensic Sciences Foundation, Inc.
410 North 21st Street
Colorado Springs, Colorado 80904-2798
(719)636-1100
<http://www.abfo.org>

American College of Emergency Physicians (ACEP)
1125 Executive Circle
Irving, TX 75038-2522
972-550-0911
800-798-1822
972-580-2816 (Fax)
<http://www.acep.org>

American College of Obstetricians and Gynecologists (ACOG)
409 12th Street SW,
PO Box 96920
Washington, DC 20090-6920
202-638-5577
800-673-8444
<http://www.acog.org>

American Medical Association (AMA)
515 N State Street
Chicago, IL 60610
800-621-8335
312-464-4184 (Fax)
<http://www.ama-assn.org>
<http://www.ama-assn.org/public/releases/assault/sa-guide.htm#acute>
(Guide: Acute management of sexual assault victims)

American Professional Society on the Abuse of Children (APSAC)
350 Poplar Avenue
Elmhurst, IL 60126
877-402-7722
<http://www.apsac.org>

American Society for Testing & Materials (ASTM)
100 Bar Harbor Drive
West Conshohocken, PA 19428-2959
610-832-9500
<http://www.astm.org>
[ASTM Standard Guide for Sexual Assault Investigation, Examination, and Evidence Collection:
<http://www.astm.org/standards/E1843.htm>]

American Society of Crime Laboratory Directors (ASCLD)
139A Technology Drive
Garner, NC 27529
919-773-2044
<http://www.asclcd.org>

Centers for Disease Control and Prevention (CDC)
1600 Clifton Road NE
Atlanta, GA 30333
800-CDC-INFO
<http://www.cdc.gov>

Federal Bureau of Investigation (FBI)
J Edgar Hoover Building
935 Pennsylvania Avenue NW
Washington, DC 20535-0001
<http://www.fbi.gov>

International Association of Chiefs of Police (IACP)
515 N. Washington St
Alexandria, VA 22314-2357
703-836-6767
<http://www.theiacp.org>

International Association of Forensic Nurses (IAFN)
6755 Business Parkway, Suite 303
Elkridge, MD 21075
410-626-7804
<http://www.iafn.org>

National Alliance to End Sexual Violence
1130 Connecticut Avenue, NW
Suite 300
Washington, DC 20036
<http://endsexualviolence.org>

National Center for the Prosecution of Violence Against Women
National District Attorneys Association
99 Canal Center Plaza, Suite 330
Alexandria, VA
http://www.ndaa.org/ncpvaw_home.html

National Children's Alliance
516 C Street, NE
Washington, DC 20002
(202) 548-0090
(800) 239-9950
<http://www.nationalchildrensalliance.org>

National Resource Center Against Domestic Violence
800-537-2238
<http://www.nrcdv.org>

National Sexual Violence Resource Center
123 N. Enola Drive
Enola, PA 17025
717.909.0710
877.739.3895

RAINN: Rape, Abuse, and Incest National Network
2000 L Street, NW
Suite 406
Washington, DC 20036
202.544.3064
<http://www.rainn.org>

Final Adult/Adolescent Forensic Medical Record

WellSpan Health Forensic Medical Record

York Hospital
 Gettysburg Hospital
 Adult/Adolescent
 Form 4431 5/2012

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Consent for Collection and Release of Evidence and Information

Confidential Document

A. Examiner Information

Print Name of Examiner: _____

Signature	Initials	Start Time

B. Reporting and Authorization

1. Agencies Contacted:

Medical Advocate Yes No _____
 Child Protective Services Yes No _____
 Other Yes No _____
 ChildLine Yes No If no, why _____

2. Report to police: Yes No

If no, provide patient with options :

Anonymous reporting *option if 18 years or older	
Medical examination and treatment without police report	
May return within 5 days from day of assault for evidence collection kit	

C. Patient Information

- I understand that hospitals and health care providers have a duty to report certain crimes to law enforcement. (Initial) _____
- I have been informed that victims of crime are eligible to submit crime victim claims to the State Victims of Crime Restitution Fund. (Initial) _____

D. Patient Consent

- I understand that a forensic medical examination for evidence of sexual assault at public expense can, with my consent, be conducted by a health care professional to discover and preserve evidence of the assault. I understand that collection of evidence may include photographing injuries and that these photographs may include the genital area. (Initial) _____
- If conducted, the report of the examination and any evidence obtained will be released to law enforcement authorities or any other investigating agencies. (Initial) _____
- I understand that I may withdraw consent at any time for any portion of the examination. (Initial) _____
- I understand that data without patient identity may be collected from this report for education and/or epidemiological studies. (Initial) _____

Signature _____ Patient Parent Guardian
 Printed Name (of above) _____ Date _____ Time _____

If Patient is 14 years or older patient signature _____
 Printed Name (of above) _____ Date _____ Time _____

Witness _____ Date _____ Time _____

Review of Systems

Reviewed in Emergency Department Record. See ED Record for Data.

Skin <input type="checkbox"/> Negative <input type="checkbox"/> Rash <input type="checkbox"/> Other _____	Cardiovascular <input type="checkbox"/> Negative <input type="checkbox"/> Chest pain <input type="checkbox"/> Palpitations <input type="checkbox"/> Other _____
Eyes <input type="checkbox"/> Negative <input type="checkbox"/> Discharge <input type="checkbox"/> Recent visual changes <input type="checkbox"/> Other _____	Pulmonary <input type="checkbox"/> Negative <input type="checkbox"/> Shortness of breath <input type="checkbox"/> Cough <input type="checkbox"/> Wheezing <input type="checkbox"/> Other _____
ENT <input type="checkbox"/> Negative <input type="checkbox"/> Ear pain R L <input type="checkbox"/> Sore throat <input type="checkbox"/> Nasal congestion <input type="checkbox"/> Dental pain <input type="checkbox"/> Other _____	Gastrointestinal <input type="checkbox"/> Negative <input type="checkbox"/> Nausea/vomiting <input type="checkbox"/> Constipation/diarrhea <input type="checkbox"/> LBM: _____ (last bowel movement) <input type="checkbox"/> Other _____
Genitourinary <input type="checkbox"/> Negative <input type="checkbox"/> Pain with urination <input type="checkbox"/> Vaginal discharge: _____ <input type="checkbox"/> Other _____	Musculoskeletal <input type="checkbox"/> Negative <input type="checkbox"/> Trauma <input type="checkbox"/> Muscle/Joint pain <input type="checkbox"/> Other _____
Neurological <input type="checkbox"/> Negative <input type="checkbox"/> Headache <input type="checkbox"/> Mental status changes <input type="checkbox"/> Other _____	Hematologic <input type="checkbox"/> Negative <input type="checkbox"/> Easy bruising <input type="checkbox"/> Recent epistaxis (nosebleed) <input type="checkbox"/> Heavy menstrual bleeding <input type="checkbox"/> Prolonged bleeding after surgical procedure <input type="checkbox"/> Other _____
Immunization <input type="checkbox"/> Up to date <input type="checkbox"/> Last Tetanus _____ <input type="checkbox"/> Hepatitis B	Immune Disorders <input type="checkbox"/> Yes _____ <input type="checkbox"/> No
Allergy Problems <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Medication Allergies _____ _____ <input type="checkbox"/> Other _____ _____	Current Medications: <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____

Patient History/Initial Assessment

Triage Vital Signs: T _____ P _____ RR _____ BP _____ **Time Recorded** _____

Domestic Violence Screen Verbalized Yes Verbalized No Done at Triage

- Pain Present? Yes No
- Where _____
- Scale _____
- Onset _____
- Quality/Type _____

Race of victim: African American Asian Caucasian Hispanic White
 Hispanic Black Native American Other: _____

Victim's Hair Color: _____

Overall Appearance (Torn clothing, disheveled...): _____

Behavioral Observations/Affect/Mood: _____

Suicidal Ideations: No Yes If yes, crisis and Emergency Physician consults done Yes

Physical Assessment *If "Other," please describe

See ED Record for Data

Neck <input type="checkbox"/> No adenopathy (swollen lymph nodes) <input type="checkbox"/> Other	Gastrointestinal <input type="checkbox"/> Abdomen soft, non tender, non distended <input type="checkbox"/> Other
Eyes <input type="checkbox"/> PEARL, no discharge <input type="checkbox"/> Other	Musculoskeletal <input type="checkbox"/> Normal range of motion, no tenderness, no deformity <input type="checkbox"/> Other
Cardiovascular <input type="checkbox"/> Regular rate, rhythm <input type="checkbox"/> Other	Gynecological <input type="checkbox"/> Last Menstrual Period _____ <input type="checkbox"/> Other
Respiratory <input type="checkbox"/> Lungs clear to auscultation <input type="checkbox"/> Other	Drug or alcohol use in past 24 hours: <input type="checkbox"/> Yes <u>Type:</u> _____ <input type="checkbox"/> No
Neurological <input type="checkbox"/> Level of Consciousness <input type="checkbox"/> Alert <input type="checkbox"/> Somnolent but arousable <input type="checkbox"/> Unconscious <input type="checkbox"/> Cognition <input type="checkbox"/> Oriented x4 <input type="checkbox"/> Other: _____ <input type="checkbox"/> No deficits noted <input type="checkbox"/> Distracted <input type="checkbox"/> Confused <input type="checkbox"/> Other: _____ <input type="checkbox"/> Glasgow Coma Scale <input type="checkbox"/> 15 <input type="checkbox"/> Other: _____ <input type="checkbox"/> Loss of Consciousness <input type="checkbox"/> No <input type="checkbox"/> Yes (describe mechanism below) <input type="checkbox"/> If yes Physician consulted: _____ <input type="checkbox"/> Unable to Recall Events <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> If yes Drug Facilitated Evidence Kit Collected, if not collected explain below	

Additional Notes:

Circumstances of the Assault

Date/Time of the assault: _____ Investigating Jurisdiction: _____
 Date/Time of the examination: _____

*if investigating jurisdiction is unknown, does victim have general knowledge of where assault occurred (city, street names)? If unknown call Pennsylvania State Police

Information Provided by: Victim Law Enforcement Other (If other, who?) _____

Location of assault: Inside Outside Home Workplace Vehicle
 Other (details): _____

Additional Information: _____

Since the assault has the victim:	Yes	No		Yes	No
Consumed alcohol			Changed clothes		
Had something to drink/eat			Washed clothes *worn during assault		
Douched			Vomited		
Used tobacco If yes, type?			Defecated		
Bathed/showered			Urinated		
Brushed or flossed teeth			Used anything to wipe/clean genital area		
Used mouthwash			Used anything to wipe off any fluid		
Washed hair			Used/discarded any tampons or menstrual pads		
			Consensual intercourse prior/after assault		
			Anal (within 5 days)	—	—
			Vaginal (within 5 days)	—	—
			Oral (within 24 hours)	—	—
			If yes to above, did ejaculation occur?	—	—
			If yes to above, where did ejaculation occur: _____		
			If yes to above, was a condom used?	—	—

WellSpan Health Forensic Medical Record

York Hospital
 Gettysburg Hospital
 Adult/Adolescent
 Form 4431 5/2012

Assailant Information

Assailant Information: Known Not Known if known relationship: _____

Assailant #1 Gender of assailant: Male Female Approximate age: _____ Race: _____
 Hair Color/Length: _____

Assailant #2 Gender of assailant: Male Female Approximate age: _____ Race: _____
 Hair Color/Length: _____

Assailant #3 Gender of assailant: Male Female Approximate age: _____ Race: _____
 Hair Color/Length: _____

Injuries to the assailant: No Yes Unsure
 (explain, recording exactly what he or she says, place quotation marks around the patient's words or phrases):

Coercion used:	Yes	No	If yes, please explain:
Fist			
Weapon			
Hitting			
Kicking			
Grabbing			
Pushing			
Gagging			
Punching			
Blind fold			
Strangulation (choking) *if yes, complete strangulation assessment			
Tied up			
Verbal (if possible, use quotes)			
Other (i.e. was patient held down, sat on, etc.) Describe:			

WellSpan Health Forensic Medical Record

York Hospital
 Gettysburg Hospital
 Adult/Adolescent
 Form 4431 5/2012

Strangulation Assessment

Reports Strangulation Yes No

If yes, consulting physician _____

History	Yes	No
Neck pain		
Neck swelling		
Difficulty breathing		
Pain with swallowing		
Loss of Consciousness		
Petechial hemorrhages		
Redness to eyes		
Sore throat		
Voice changes (raspy, hoarse)		
Nausea/ vomiting		
Light headedness		
Incontinence		
Loss of memory		
Coughing		
Headache		

Assessment	Yes	No
Injuries to neck and throat:		
Back of neck		
Behind ears		
Eyelids		
Jaw		
Upper chin		
Scratches		
Ligature marks		
Ligature burns		
Bruising		
Patterned injury		
Other:		
Pulse oximetry		%

Method of strangulation:

- One arm Left Right Unknown
 One hand Left Right Unknown Fist Open
 Two hands
 Ligature
 Approach from front
 Approach from behind
 Approach, unsure
 Other (please describe) _____

Recommended studies	Yes	No
Soft Tissue xray of neck		
CAT Scan of soft tissue of neck		

Ordering physician _____

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ACTS DESCRIBED BY PATIENT

• Any penetration of the genital or anal opening, however slight, constitutes the act of penetration. Oral copulation requires only contact. Questions about penetration of orifices need to be asked specifically.

1. Penetration of vagina by:

	NO	YES	ATTEMPTED	UNSURE	Describe
Penis					
Finger					
Object					

2. Penetration of anus by:

	NO	YES	ATTEMPTED	UNSURE	Describe
Penis					
Finger					
Object					

3. Oral copulation of genitals:

	NO	YES	ATTEMPTED	UNSURE	Describe
Of patient by assailant					
Of assailant by patient					

4. Oral copulation of anus:

	NO	YES	ATTEMPTED	UNSURE	Describe
Of patient by assailant					
Of assailant by patient					

5. Non-genital act(s):

	NO	YES	ATTEMPTED	UNSURE	Describe
Licking					
Kissing					
Suction Injury					
Biting					

6. Other act(s):

	NO	YES	ATTEMPTED	UNSURE	Describe
Other Acts					

7. Did ejaculation occur?:

	NO	YES	UNSURE	Describe
If yes, note location(s):				<input type="checkbox"/> Mouth <input type="checkbox"/> On Clothing <input type="checkbox"/> Vagina <input type="checkbox"/> On Bedding <input type="checkbox"/> Anus/Rectum <input type="checkbox"/> Other _____

8. Contraceptive or lubricant products used:

	NO	YES	ATTEMPTED	UNSURE	Describe
Spermicidal Product?					
Lubricant?					
Condom?					
location of condom:					

--

Forensic Images Obtained Yes No If not why _____

Alternative Light Source Yes No If not why _____

Assessment for Injury to the Body

	No Visual Findings at time of exam	Physical findings per BALD Step See Body map	Additional Notes
Head			
Neck			
Upper Extremities			
Chest			
Breast			
Nipples			
Abdomen			
Lower Extremities			
Back			
Buttocks			

Description of Findings/Additional Notes:

_____ _____ _____ _____

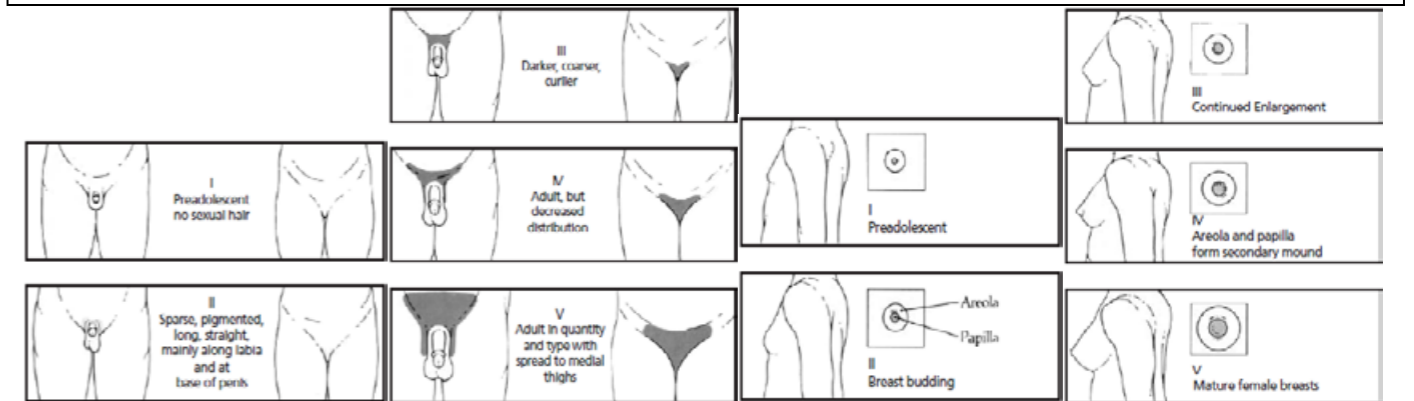
Forensic Images Obtained Yes No If not why _____
 Alternative Light Source Yes No If not why _____

Assessment for Injury to Genitalia: Female				
	No Visual Findings at time of exam	Physical findings per BALD Step See Body map	Toluidine Blue	Additional Notes
Mons Pubis				
Labia Majora				
Labia Minora				
Hymen				
Posterior Fourchette				
Fossa Navicularis				
Vaginal Wall (Left)				
Vaginal Wall (Right)				
Cervix				
Perineum				
Anus				

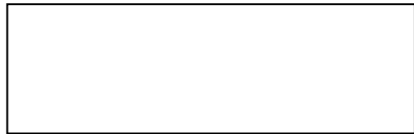
Decription of Findings/Additional Notes:

Forensic Images Obtained Yes No If not why _____
 Alternative Light Source Yes No If not why _____

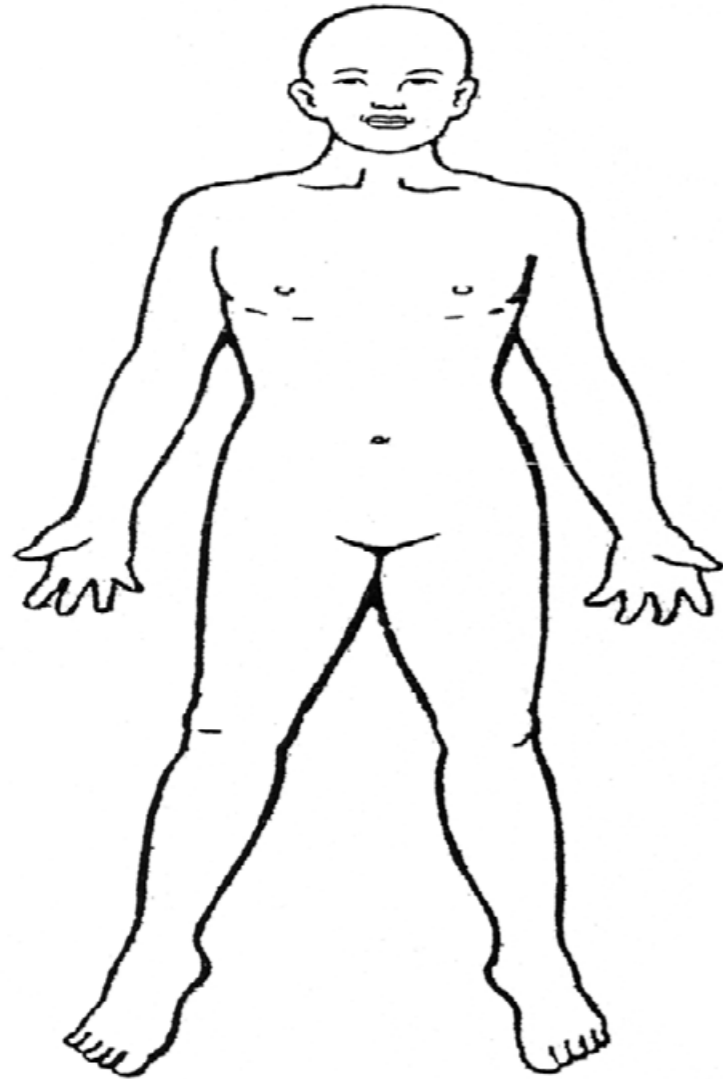
Assessment for Injury to Genitalia: Male				
	No Visual Findings at time of exam	Physical findings per BALD Step See Body map	Toluidine Blue	Additional Notes
Circumcised <input type="checkbox"/> Yes <input type="checkbox"/> No				
Glans/Urethral Meatus				
Shaft				
Scrotum				
Testes				
Perineum				
Anus				
Examination Techniques (male or female)		Yes	No	
Direct Visualization with labial traction		<input type="checkbox"/>	<input type="checkbox"/>	
Cotton-tipped applicator technique		<input type="checkbox"/>	<input type="checkbox"/>	
Saline technique		<input type="checkbox"/>	<input type="checkbox"/>	
Foley catheter technique		<input type="checkbox"/>	<input type="checkbox"/>	
Speculum		<input type="checkbox"/>	<input type="checkbox"/>	
Other _____				
Tanner Stage Breast (female only):		Tanner Stage Genital:		



Feingold, David. "Pediatric Endocrinology" In *Atlas of Pediatric Physical Diagnosis, Second Edition*, Philadelphia. W.B. Saunders, 1992, 9.16-19



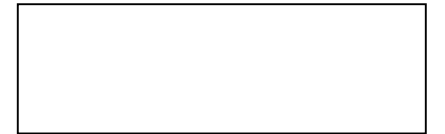
Right



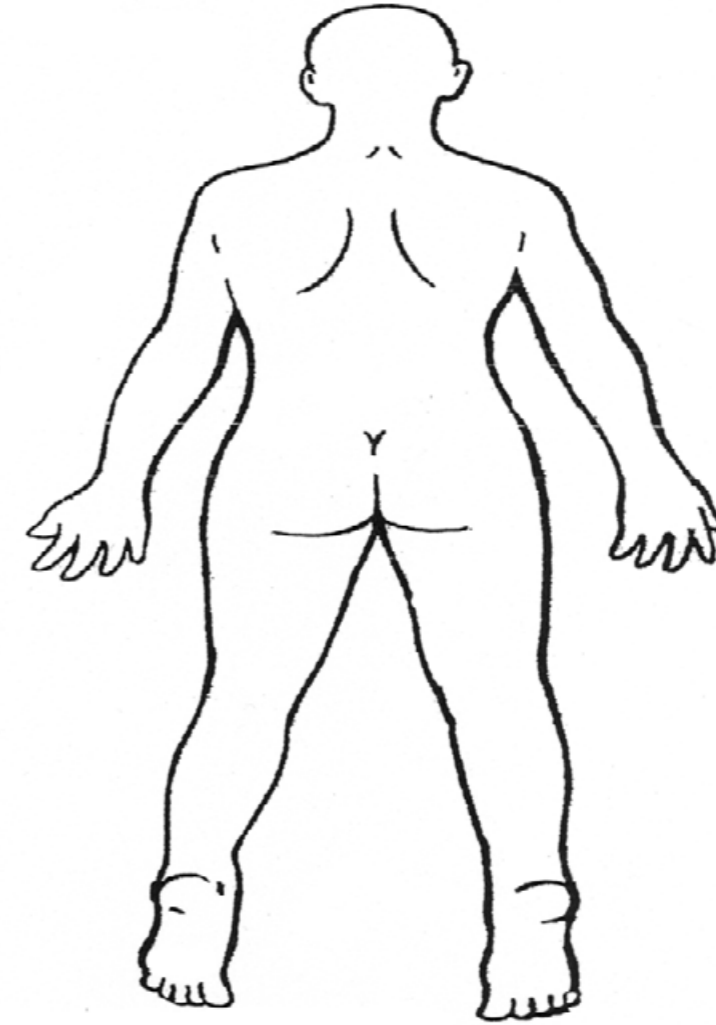
Left

B	BR	Bruise	S	SW	Swelling
	BL	Bleeding		ST	Stain (+FL if fluorescent)
	BI	Bitemark	T	TE	Tenderness
	BU	Burn		TR	Trace Evidence
A	AB	Abrasion	E	ER	Erythema
	AV	Avulsion	P	PA	Patterned Injury
L	LA	Laceration		PT	Petechiae
D	DE	Deformity		PE	Penetrating Injury I=incised S=stab
				P	Puncture

Draw shape, use initials & size, color, shape (e.g. "BR red oval 3cm H x 2cm W")
 Carter-Snell, C. (2011) <http://mtroyal.ca/forensicrosearch>. (see "resources" section) May be copied.



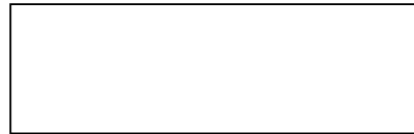
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Right

B	BR	Bruise	S	SW	Swelling
	BL	Bleeding		ST	Stain (+FL if fluorescent)
	BI	Bitemark	T	TE	Tenderness
	BU	Burn		TR	Trace Evidence
A	AB	Abrasion	E	ER	Erythema
	AV	Avulsion	P	PA	Patterned Injury
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D	DE	Deformity		PE	Penetrating Injury I=incised S=stab
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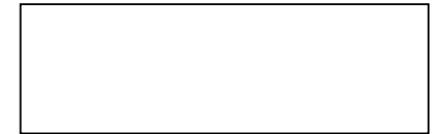


Right



B	BR	Bruise	S	SW	Swelling
	BL	Bleeding		ST	Stain (+FL if fluorescent)
	BI	Bitemark	T	TE	Tenderness
	BU	Burn		TR	Trace Evidence
A	AB	Abrasion	E	ER	Erythema
	AV	Avulsion	P	PA	Patterned Injury
L	LA	Laceration		PT	Petechiae
D	DE	Deformity		PE	Penetrating Injury I=incised S=stab
				P	Puncture

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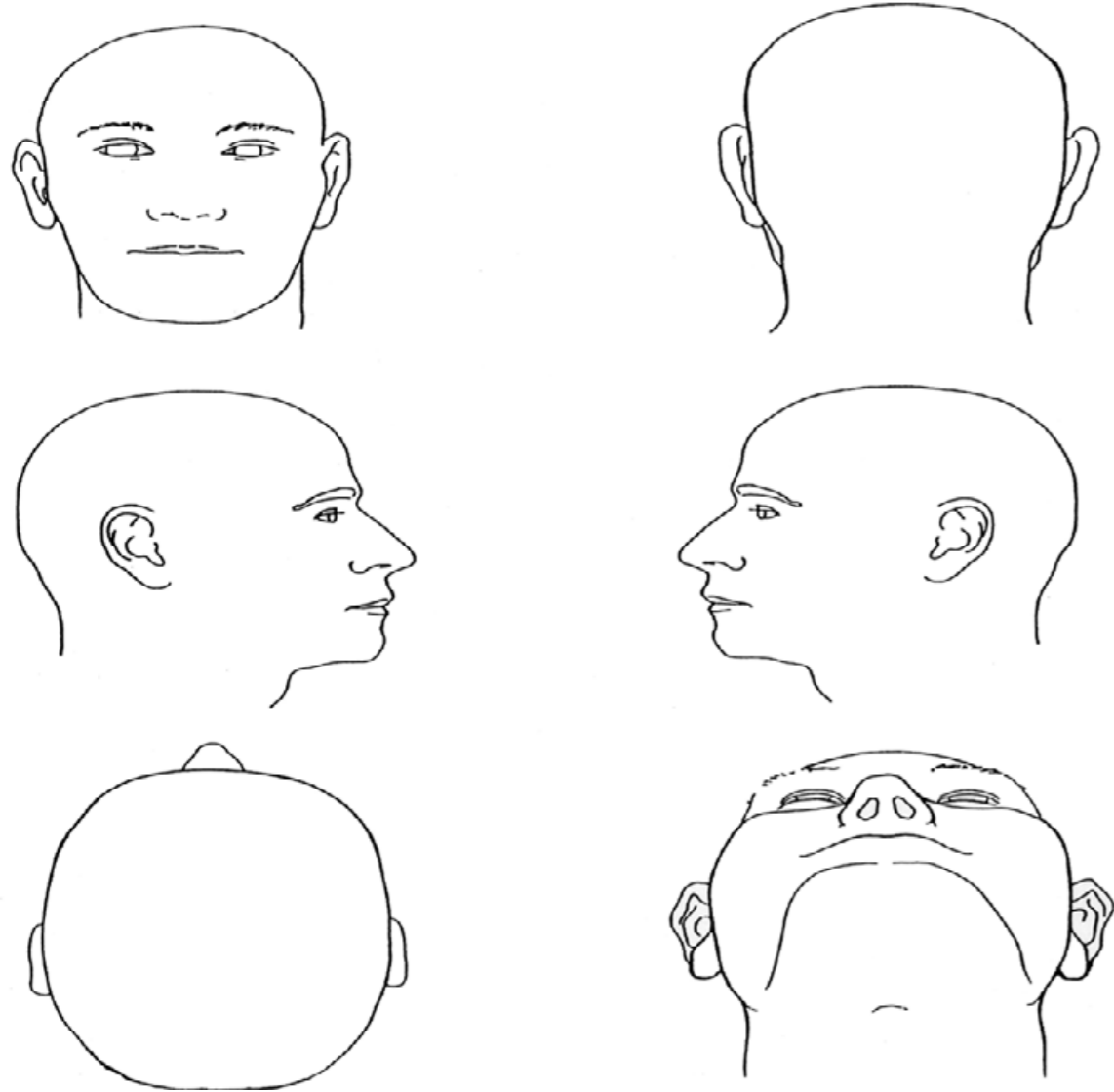
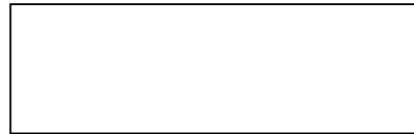


Left



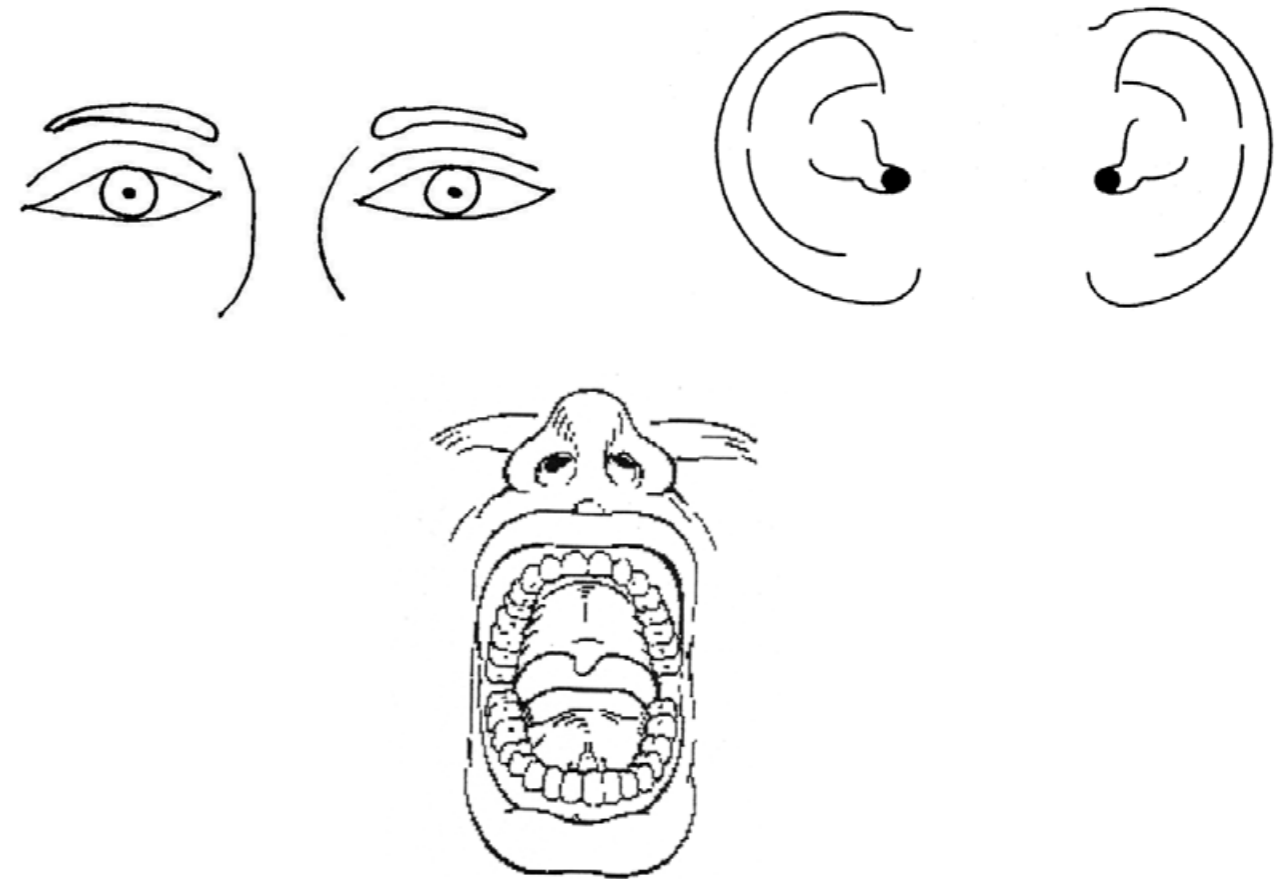
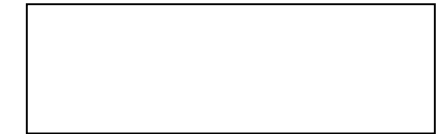
B	BR	Bruise	S	SW	Swelling
	BL	Bleeding		ST	Stain (+FL if fluorescent)
	BI	Bitemark	T	TE	Tenderness
	BU	Burn		TR	Trace Evidence
A	AB	Abrasion	E	ER	Erythema
	AV	Avulsion	P	PA	Patterned Injury
L	LA	Laceration		PT	Petechiae
D	DE	Deformity		PE	Penetrating Injury I=incised S=stab
				P	Puncture

Draw shape, use initials & size, color, shape (e.g. "BR red oval 3cm H x 2cm W")
 Carter-Snell, C. (2011) <http://mtroval.ca/forensicresearch>. (see "resources" section) May be copied.



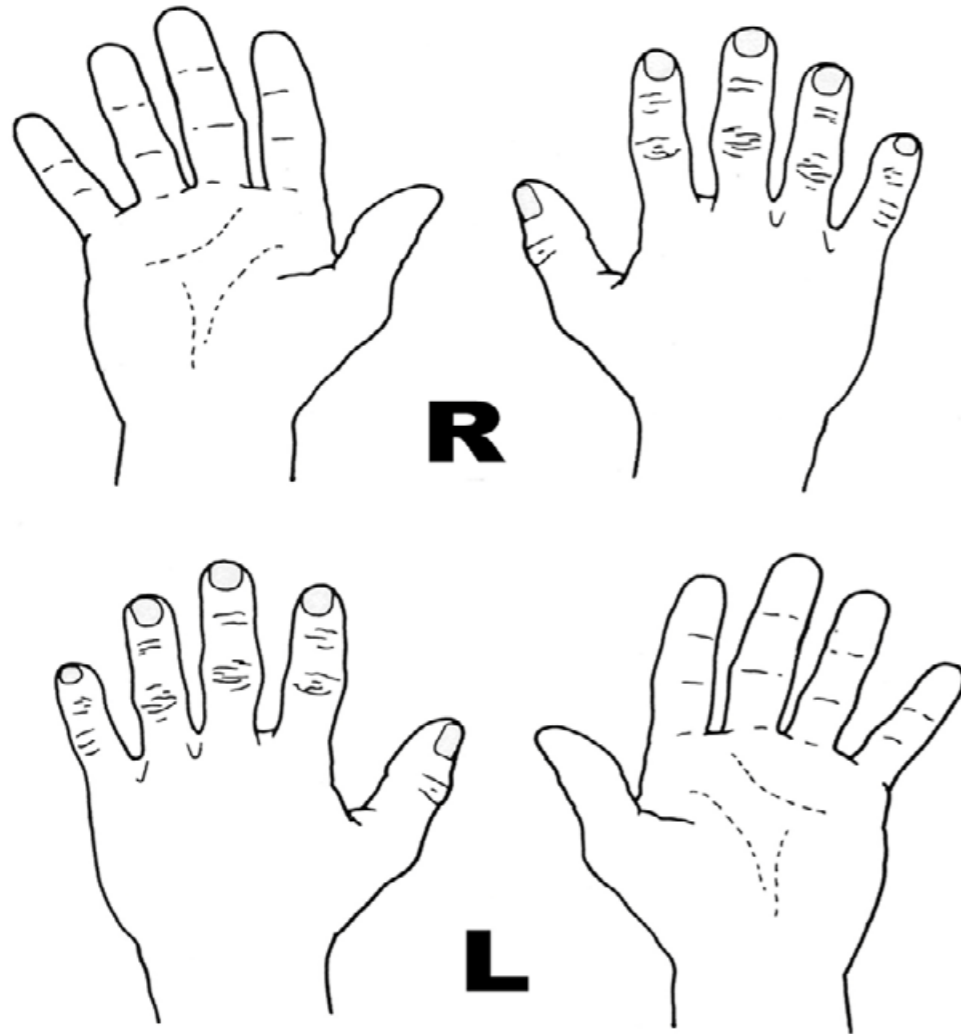
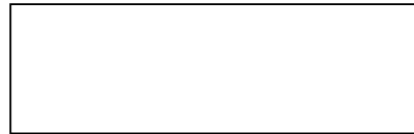
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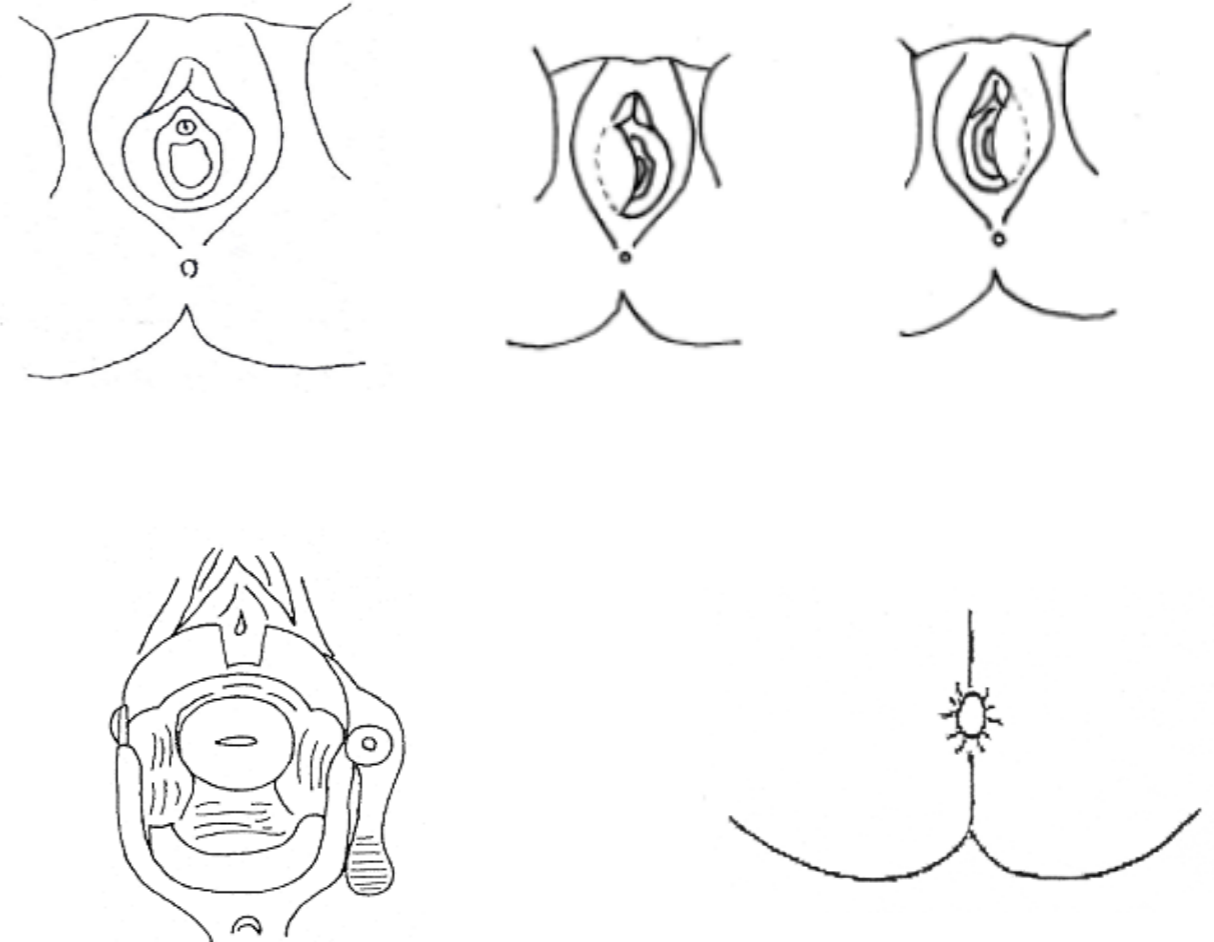
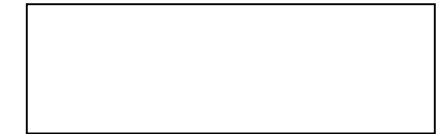
B	BR	Bruise	S	SW	Swelling
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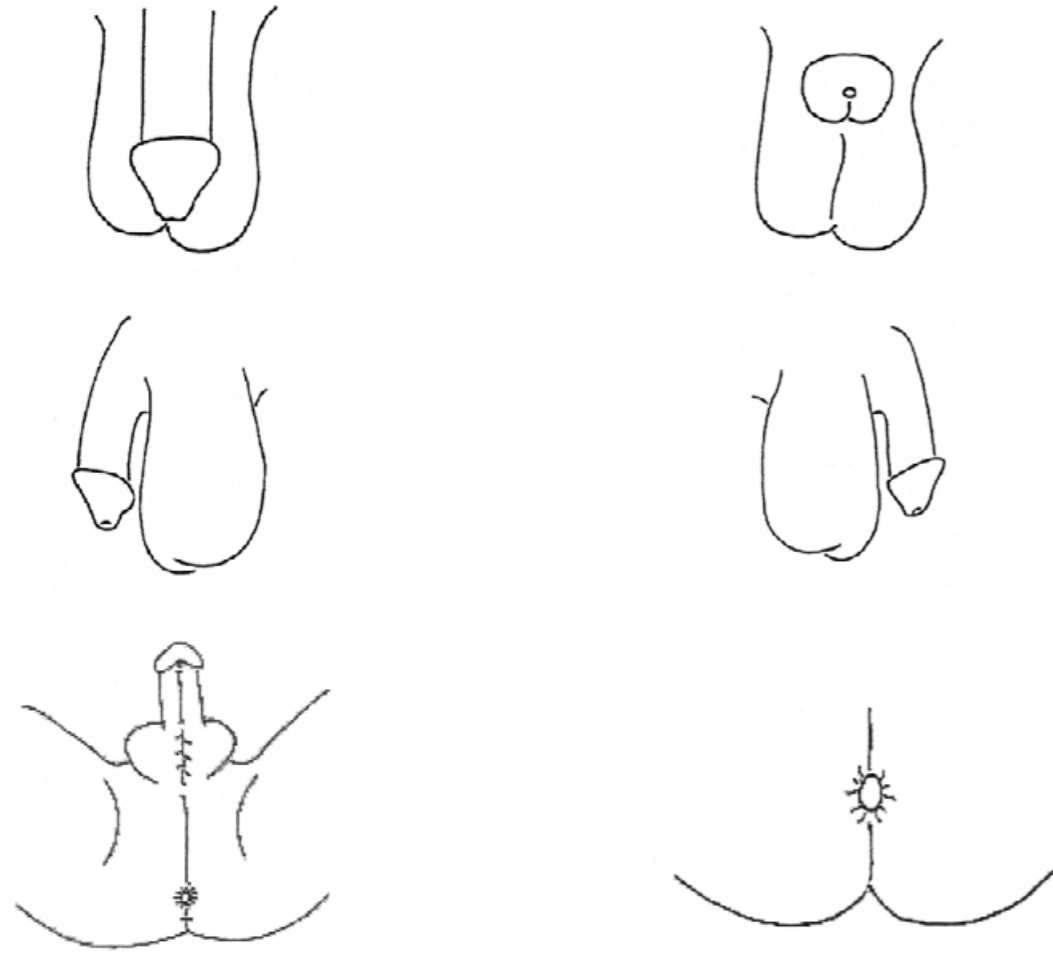
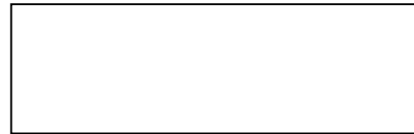
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	BI	Bitemark	T	TE	Tenderness
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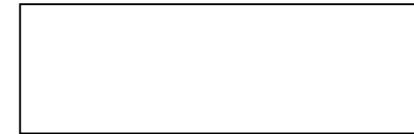
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Sexual Assault Evidence Collection Kit

Collection Envelopes provided in Evidence Collection Kit

	Done	Not Done
Step 2: Foreign Material/Clothing and Underpants Collection If not done, why? _____ _____	<input type="checkbox"/>	<input type="checkbox"/>
Step 3: Oral Assault Collection Samples If not done, why? _____ _____	<input type="checkbox"/>	<input type="checkbox"/>
Step 4: Miscellaneous Collection (Debris, Dried Secretions, Tampon/Sanitary Napkin) If not done, why? _____ _____	<input type="checkbox"/>	<input type="checkbox"/>
Step 5: Fingernail Clippings/Scrapings If not done, why? _____ _____	<input type="checkbox"/>	<input type="checkbox"/>
Step 6: Pubic Hair Combing If not done, why? _____ _____	<input type="checkbox"/>	<input type="checkbox"/>
Step 7: Vaginal Assault/Penile Assault Collection Samples If not done, why? _____ _____	<input type="checkbox"/>	<input type="checkbox"/>
Step 8: Rectal Assault Collection Samples If not done, why? _____ _____	<input type="checkbox"/>	<input type="checkbox"/>
Step 9: Buccal Swab Collection If not done, why? _____ _____	<input type="checkbox"/>	<input type="checkbox"/>

See ED Record for Data

Medication Flowsheet					
Allergies					
Date/Time	Medication	Dose	Route	Site	Initials
/	CEFIXIME (SUPRAX) AND	400 MG	PO		
/	AZITHROMYCIN (ZITHROMAX) AND	1 GRAM	PO		
/	EMERGENCY CONTRACEPTION AND	<input type="checkbox"/> 1 TABLET <input type="checkbox"/> 2 TABLETS	PO		
/	ZOFRAN	<input type="checkbox"/> 4 MG <input type="checkbox"/> 8 MG	PO		
/	TAKE HOME PACK <input type="checkbox"/> FLAGYL <input type="checkbox"/> EMERGENCY CONTRACEPTION <input type="checkbox"/> ZOFRAN	2 grams 1 tablet ____MG	PO PO PO		
/					
/					
/					
/					
/					
/					
/					
Nurse Initials/Signature		Initials	Signature		

Medical Advocate Present to address safety plan Yes No

SAFETY PLAN CHECKLIST FOR DISCHARGE (if not done by advocate)

YES NO

- | | | |
|-----|-----|--------------------------------------------------------------------------------------------------------------|
| ___ | ___ | 1. Has a safe place to go upon discharge, and is able to identify alternatives if this place becomes unsafe. |
| ___ | ___ | 2. Discussed personal safety at home/public areas. |
| ___ | ___ | 3. Identifies a support person. |
| ___ | ___ | 4. Information given about counseling options and the benefits of getting counseling. |

ANY OTHER SAFETY ISSUES ADDRESSED:

***If answered yes for domestic violence screen, list interventions here**

Discharge Vital Signs: Temp ___ Heart Rate ___ Respiratory Rate ___ Blood Pressure (age 5 and up) _____



Discharge Instructions

Realizing that no one is able to remember all the information provided during an examination, you are receiving a list of medications that have been administered to you during this examination and /or prescribed for you to take after discharge. Information regarding your follow-up is also included. The professionals who cared for you understand that it took great courage and strength to come in for an examination. Once you leave, you may experience a wide range of emotions as a result of the assault. Please use this information to assist you in your recovery.

Medications:

No medications were given today. Please follow up with your healthcare provider within two weeks.

You have been given the following medications:

1. Chlamydia prevention
 - Azithromycin 1 gram orally
 - Doxycycline as prescribed
 - Levaquin as prescribed
 - Other: _____
2. Gonorrhea prevention
 - Suprax 40mg orally
 - Ceftriaxone 125 mg injection
 - Azithromycin 2 grams orally
 - Other: _____
3. Trichomoniasis and Bacterial Vaginosis prevention
 - Flagyl 2 grams orally
 - Other: _____

Note: Oral Contraceptives may not work properly when taking antibiotics. If you are on birth control, you should use an additional method of birth control through the current month or “pack of pills”.

4. Hepatitis B Vaccine
 - 1st dose today, 2nd dose in two months, 3rd dose within four months (see family doctor for 2nd & 3rd dose)
 - Patient reports having vaccine in past
 - Patient will inform healthcare provider at the follow-up exam with current status
5. Emergency Contraception Provided:
Type: _____ Dose: _____
6. Diphtheria/ Tetanus
 - Patient reports being up-to-date
 - Patient will inform healthcare provider at the follow-up exam with current status
 - Given in Emergency Department
7. Antiemetic: Type: _____ Dose: _____



Follow-Up Instructions

Your pregnancy test was positive negative today. You should have a follow-up evaluation for pregnancy by your healthcare provider.

No treatment for HIV was provided today. Please refer to your community’s resource list(s) for testing and counseling options.

No sexually transmitted infection testing was done today. Please discuss any concerns with your healthcare provider during your follow-up visit.

You did not receive a pap smear during the visit. Please discuss any concerns with your healthcare provider during your follow up visit.

Please make an appointment to be seen by your healthcare provider or call him/her within **two weeks** for a follow-up appointment, even if you think everything is OK. Bring these Discharge Instructions with you.

Please call your healthcare provider sooner if you experience:

- Signs of infection such as fever, pain, sores, discharge, etc.
- Urinary symptoms such as frequent, painful or difficult urination
- Unusual vaginal bleeding
- A missed menstrual period
- Stomach pain
- Anything unusual or different bothering you

Victims may experience symptoms of rape trauma syndrome at anytime following an assault. Symptoms may occur immediately, days, weeks, or months after the assault, and may include:

- Headaches
- Stomach pain
- Depression
- Sleep disturbances
- Disruption of sexual responses
- Nightmares
- Exaggerated startle response
- Flashbacks

If any of these symptoms occur, please contact your healthcare provider or counseling service provider. If you have **thoughts of hurting yourself or ending your life you need to speak to someone immediately:**

York Hospital Crisis Intervention 717-851-5320
Domestic Violence Hotline 1-800-262-8444
Sexual Assault Hotline 1-800-422-3204
Gettysburg Hospital Crisis Intervention 717-851-5578

Additional Information

The examiner handling your case is: _____

If you need to reach your examiner:

- York: 717-851-2311
- Gettysburg: 717-337-4299

Examiners are not on-site at all times, please leave a message and someone will get back to you by the next business day. If you have any questions about the evidence kit "results" including questions about drug facilitated kits please contact the Law Enforcement agency you're working with.

The victim services center in your area is:

- YWCA Victim Assistance Center (717)854-3131
- Survivors (717) 334-9777

The Police Department Notified: _____

Department Phone Number: _____

With your permission, a nurse will contact you to check on your status Yes No

Phone number to call _____ OK to leave a message Yes No

Additional Instructions: _____

This information is a guide to your care following an examination for sexual assault and is to be used in conjunction with any additional information provided to you by your examiner and/or primary healthcare provider. Please bring discharge instructions to your follow up appointment.

Discharge Instructions Provided

Signature	Initials	End Time

Final Pediatric Forensic Medical Record

Consent for Collection and Release of Evidence and Information

Confidential Document	
A. Examiner Information	
Print Name of Examiner: _____	
Signature	Initials
Start Time	
B. Reporting and Authorization	
1. Agencies Contacted:	
Medical Advocate	Yes No _____
Child Protective Services	Yes No _____
Other	Yes No _____
ChildLine	Yes No If no, why _____
2. Report to police:	Yes No _____
C. Patient Information	
• I understand that hospitals and health care providers have a duty to report certain crimes to law enforcement.	(Initial) _____
• I have been informed that victims of crime are eligible to submit crime victim claims to the State Victims of Crime Restitution Fund.	(Initial) _____
D. Patient Consent	
• I understand that a forensic medical examination for evidence of sexual assault at public expense can, with my consent, be conducted by a health care professional to discover and preserve evidence of the assault. I understand that collection of evidence may include photographing injuries and that these photographs may include the genital area.	(Initial) _____
• If conducted, the report of the examination and any evidence obtained will be released to law enforcement authorities or any other investigating agencies.	(Initial) _____
• I understand that I may withdraw consent at any time for any portion of the examination.	(Initial) _____
• I understand that data without patient identity may be collected from this report for education and/or epidemiological studies.	(Initial) _____
Signature _____ <input type="checkbox"/> Patient <input type="checkbox"/> Parent <input type="checkbox"/> Guardian	
Printed Name (of above) _____ Date _____ Time _____	
If Patient is 14 years or older patient signature _____	
Printed Name (of above) _____ Date _____ Time _____	
Witness _____ Date _____ Time _____	

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Patient Social History	
1. History Provided By:	Relationship to Patient
2. Household Composition ☐ See CY47	
Living in the home	Relationship to Patient
Primary Caretaker: _____	
Domestic Abuse Screen <i>*Applies to parent as well as the patient</i> Abuse Suspected, Noted or Verbalized by patient or caregiver <input type="checkbox"/> Verbalized No <input type="checkbox"/> Verbalized Yes <input type="checkbox"/> Noted <input type="checkbox"/> Suspected <input type="checkbox"/> Unable to Assess _____ _____ _____ _____ _____	Concerns from patient and/or caregiver: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

Additional Notes: _____ _____ _____ _____

--

Review of Systems	
<input type="checkbox"/> Reviewed in Emergency Department Record. See ED Record for Data.	
Skin <input type="checkbox"/> Negative <input type="checkbox"/> Rash <input type="checkbox"/> Other _____	Cardiovascular <input type="checkbox"/> Negative <input type="checkbox"/> Chest pain <input type="checkbox"/> Palpitations <input type="checkbox"/> Other
Eyes <input type="checkbox"/> Negative <input type="checkbox"/> Discharge <input type="checkbox"/> Recent visual changes <input type="checkbox"/> Other _____	Pulmonary <input type="checkbox"/> Negative <input type="checkbox"/> Shortness of breath <input type="checkbox"/> Cough <input type="checkbox"/> Wheezing <input type="checkbox"/> Other
ENT <input type="checkbox"/> Negative <input type="checkbox"/> Ear pain R L <input type="checkbox"/> Sore throat <input type="checkbox"/> Nasal congestion <input type="checkbox"/> Dental pain <input type="checkbox"/> Other	Gastrointestinal <input type="checkbox"/> Negative <input type="checkbox"/> Nausea/vomiting <input type="checkbox"/> Constipation/diarrhea <input type="checkbox"/> LBM: _____ (last bowel movement) <input type="checkbox"/> Other
Genitourinary <input type="checkbox"/> Negative <input type="checkbox"/> Pain with urination <input type="checkbox"/> Vaginal discharge: _____ <input type="checkbox"/> Other	Musculoskeletal <input type="checkbox"/> Negative <input type="checkbox"/> Trauma <input type="checkbox"/> Muscle/Joint pain <input type="checkbox"/> Other
Neurological <input type="checkbox"/> Negative <input type="checkbox"/> Headache <input type="checkbox"/> Mental status changes <input type="checkbox"/> Other _____	Hematologic <input type="checkbox"/> Negative <input type="checkbox"/> Easy bruising <input type="checkbox"/> Recent epistaxis (nosebleed) <input type="checkbox"/> Heavy menstrual bleeding <input type="checkbox"/> Prolonged bleeding after surgical procedure <input type="checkbox"/> Other
Immunization <input type="checkbox"/> Up to date <input type="checkbox"/> Last Tetanus _____ <input type="checkbox"/> Hepatitis B	Immune Disorders <input type="checkbox"/> Yes _____ <input type="checkbox"/> No
Allergy Problems ☐ Yes ☐No <input type="checkbox"/> Medication Allergies _____ _____ _____ <input type="checkbox"/> Other _____ _____ _____	Current Medications: <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____

Patient History/Initial Assessment

Triage Vital Signs: T _____ P _____ RR _____ BP _____ Time Recorded _____

- Pain Present? Yes No
- Where _____
- Scale _____
- Onset _____
- Quality/Type _____

Overall Appearance (Torn clothing, disheveled...): _____

Behavioral Observations/Affect/Mood: _____

Suicidal Ideations: No Yes If yes, crisis and Emergency Physician consults done Yes

Post-Assault Hygiene Activity <input type="checkbox"/> Not applicable if over 120 hours			
<input type="checkbox"/> Information provided by patient			
<input type="checkbox"/> Information provided by parent or caregiver			
	No	Yes	Unknown
Urinated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Defecated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Genital or body wipes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, describe			
Oral gargle/rinse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bath/shower/wash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brushed teeth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changed clothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, describe			

Evidence Collection <input type="checkbox"/> Not applicable if over 120 hours			
If not why: _____			

	No	Yes	Notes
Underwear/Diaper	<input type="checkbox"/>	<input type="checkbox"/>	
Buccal Swab	<input type="checkbox"/>	<input type="checkbox"/>	
External Genital Swab	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	

Physical Assessment *If "Other," please describe

See ED Record for Data

Neck <input type="checkbox"/> No adenopathy (swollen lymph nodes) <input type="checkbox"/> Other _____	Gastrointestinal <input type="checkbox"/> Abdomen soft, non tender, non distended <input type="checkbox"/> Other _____
Eyes <input type="checkbox"/> PEARL, no discharge <input type="checkbox"/> Other _____	Musculoskeletal <input type="checkbox"/> Normal range of motion, no tenderness, no deformity <input type="checkbox"/> Other _____
Cardiovascular <input type="checkbox"/> Regular rate, rhythm <input type="checkbox"/> Other _____	Gynecological <input type="checkbox"/> Last Menstrual Period _____ <input type="checkbox"/> Other _____
Respiratory <input type="checkbox"/> Lungs clear to auscultation <input type="checkbox"/> Other _____	Drug or alcohol use in past 24 hours: <input type="checkbox"/> Yes Type: _____ <input type="checkbox"/> No

Neurological (Infant/Nonverbal Italicized)

	1	2	3	4	5	6
Eyes	Does not open eyes	Opens eyes in response to painful stimuli	Opens eyes in response to voice	Opens eyes spontaneously	N/A	N/A
Verbal	Makes no sound	Incomprehensible sounds <i>Inconsolable, agitated</i>	Utters inappropriate words <i>Inconsistently inconsolable, moaning</i>	Confused, disoriented <i>Cries, but consolable; inappropriate interaction</i>	Oriented, converses normally <i>Smiles, orientated to sounds, follows objects, interacts</i>	N/A
Motor	Makes no movements	Extension response (decerebrate) to painful stimuli	Abnormal flexion (decorticate) to painful stimuli	Flexion/withdrawal to painful stimuli <i>Infant withdrawals from pain</i>	Localizes painful stimuli <i>Infant withdrawals from touch</i>	Obeys commands <i>Infant moves spontaneously or purposefully</i>

Additional Notes:

WellSpan Health Forensic Medical Record

York Hospital
 Gettysburg Hospital
 Pediatric
 Form 4430 R-5/2012

Forensic Images Obtained Yes No If not why _____

Alternative Light Source Yes No If not why _____

Assessment for Injury to Body			
	No Visual Findings at time of exam	Physical findings per BALD Step See Body map	Additional Notes
Head			
Neck			
Upper Extremities			
Chest			
Breast			
Nipples			
Abdomen			
Lower Extremities			
Back			
Buttocks			

Description of Findings/Additional Notes:

WellSpan Health Forensic Medical Record

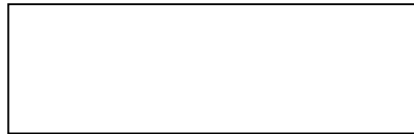
York Hospital
 Gettysburg Hospital
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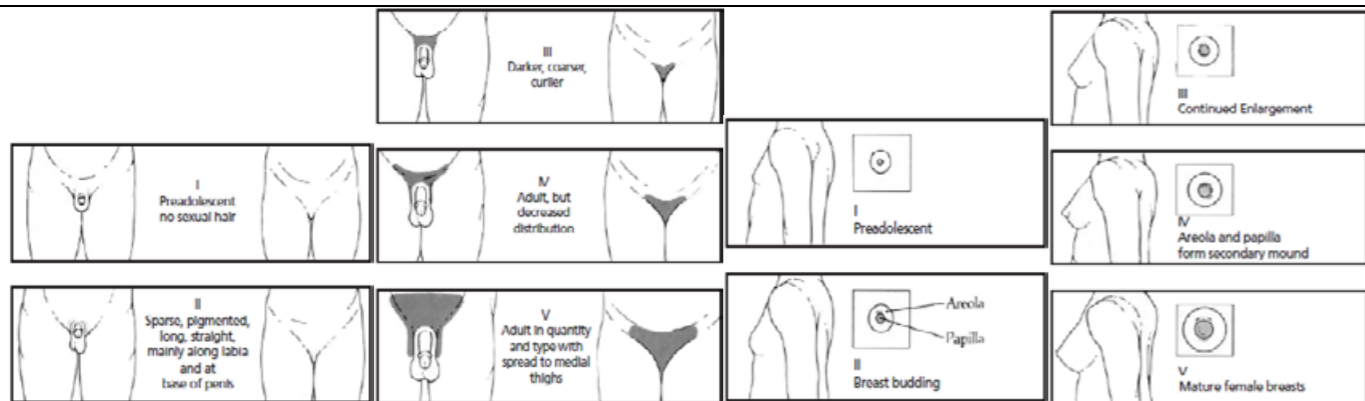
Assessment for Injury to Genitalia: Female				
	No Visual Findings at time of exam	Physical findings per BALD Step See Body map	Toluidine Blue	Additional Notes
Mons Pubis				
Labia Majora				
Labia Minora				
Hymen				
Posterior Fourchette				
Fossa Navicularis				
Vaginal Wall (Left)				
Vaginal Wall (Right)				
Cervix				
Perineum				
Anus				

Description of Findings/Additional Notes:

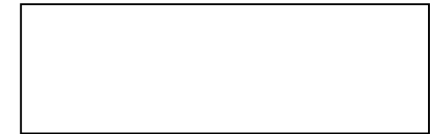


Forensic Images Obtained Yes No If not why _____
 Alternative Light Source Yes No If not why _____

Assessment for Injury to Genitalia: Male				
Circumcised <input type="checkbox"/> Yes <input type="checkbox"/> No				
	No Visual Findings at time of exam	Physical findings per BALD Step See Body map	Toluidine Blue	Additional Notes
Glans/Urethral Meatus				
Shaft				
Scrotum				
Testes				
Perineum				
Anus				
Examination Techniques (male or female)		Yes	No	
Direct Visualization with labial traction		<input type="checkbox"/>	<input type="checkbox"/>	
Cotton-tipped applicator technique		<input type="checkbox"/>	<input type="checkbox"/>	
Saline technique		<input type="checkbox"/>	<input type="checkbox"/>	
Foley catheter technique		<input type="checkbox"/>	<input type="checkbox"/>	
Video		<input type="checkbox"/>	<input type="checkbox"/>	
Other _____				
Tanner Stage Breast (female only):		Tanner Stage Genital:		

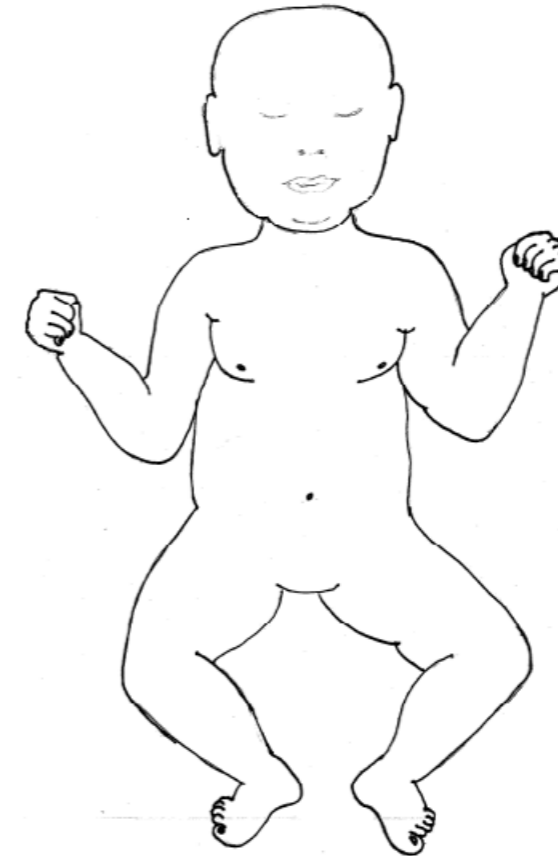


Feingold, David. "Pediatric Endocrinology" In *Atlas of Pediatric Physical Diagnosis, Second Edition*, Philadelphia. W.B. Saunders, 1992, 9.16-19



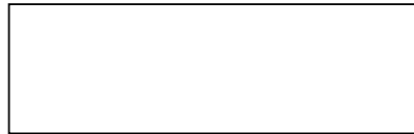
Right

Left



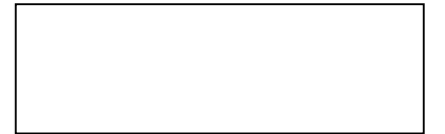
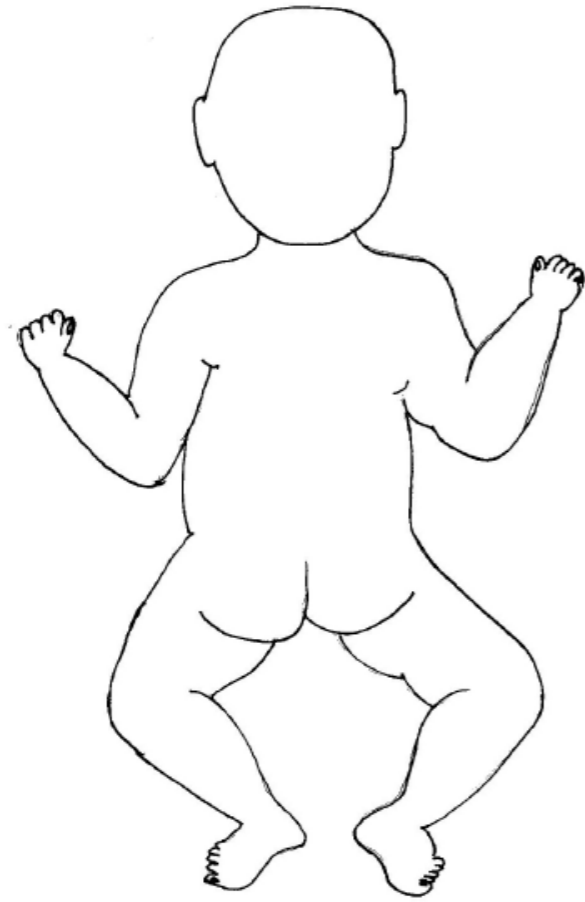
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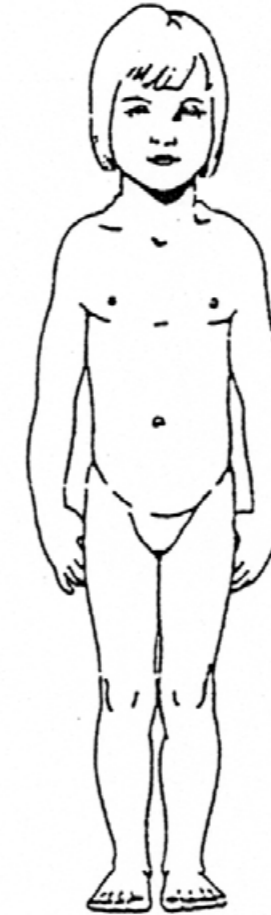
Left

Right



Right

Left



B	BR	Bruise	S	SW	Swelling
	BL	Bleeding		ST	Stain (+FL if fluorescent)
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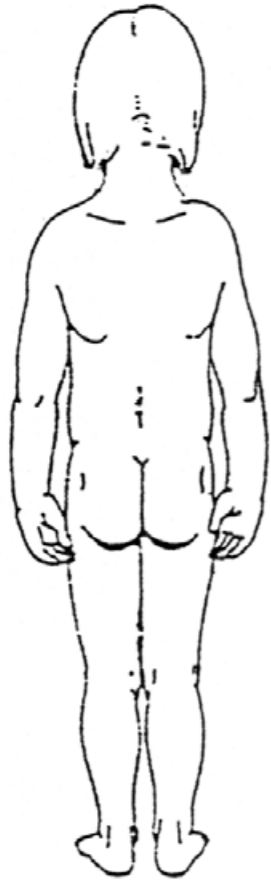
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D	DE	Deformity		PE	Penetrating Injury I=incised S=stab
				P	Puncture

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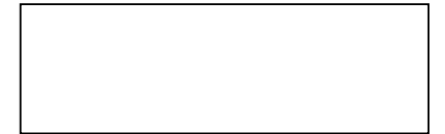
Left

Right



B	BR	Bruise	S	SW	Swelling
	BL	Bleeding		ST	Stain (+FL if fluorescent)
	BI	Bitemark	T	TE	Tenderness
	BU	Burn		TR	Trace Evidence
A	AB	Abrasion	E	ER	Erythema
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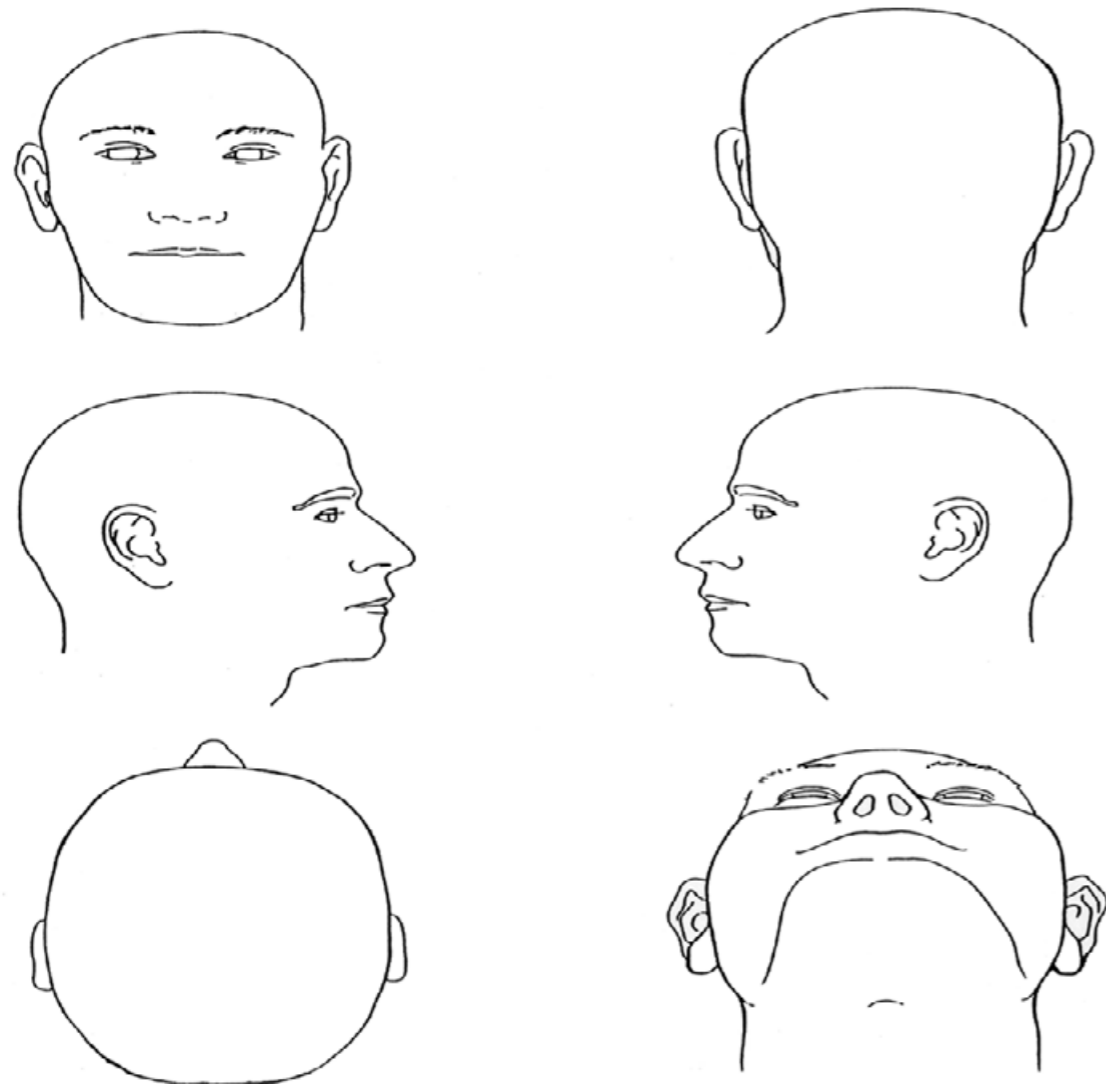
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Right



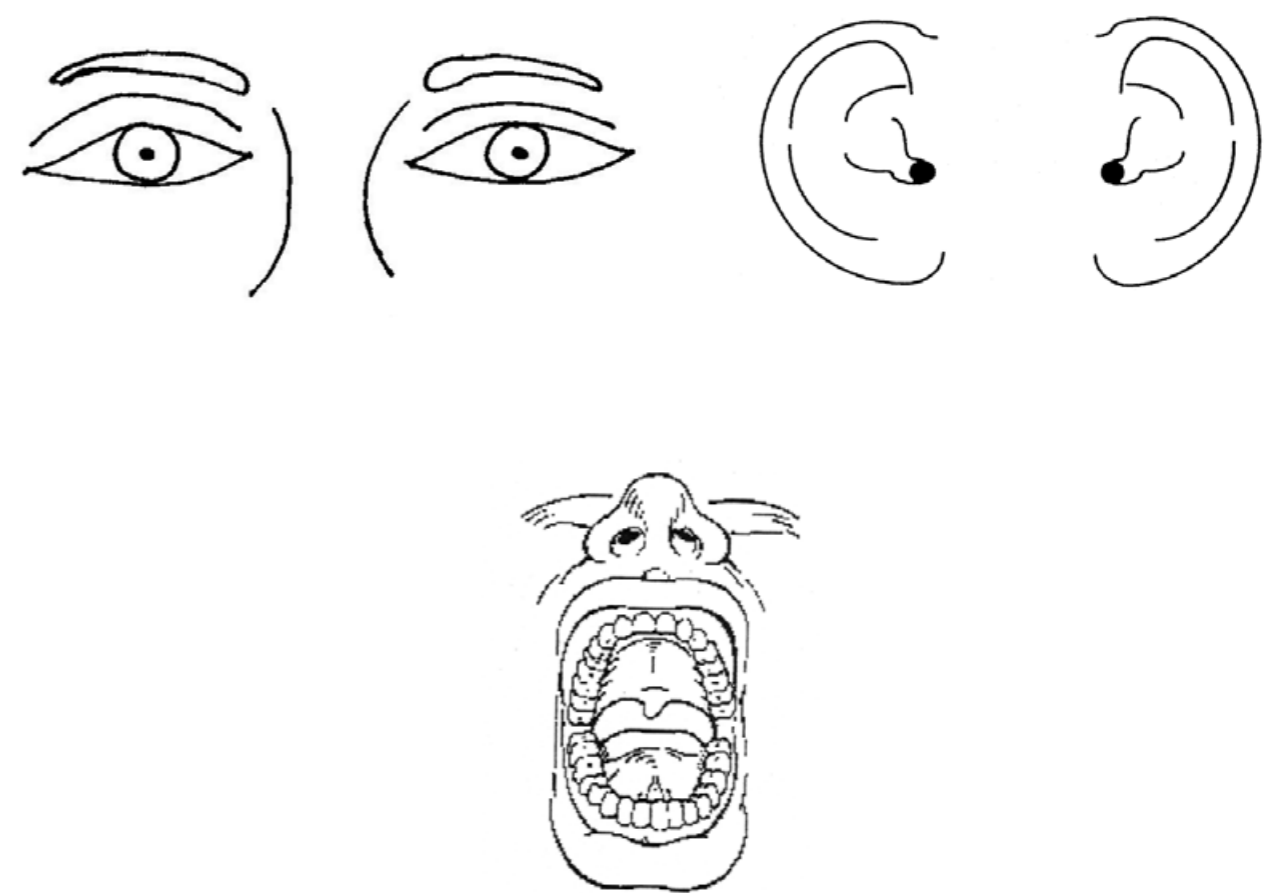
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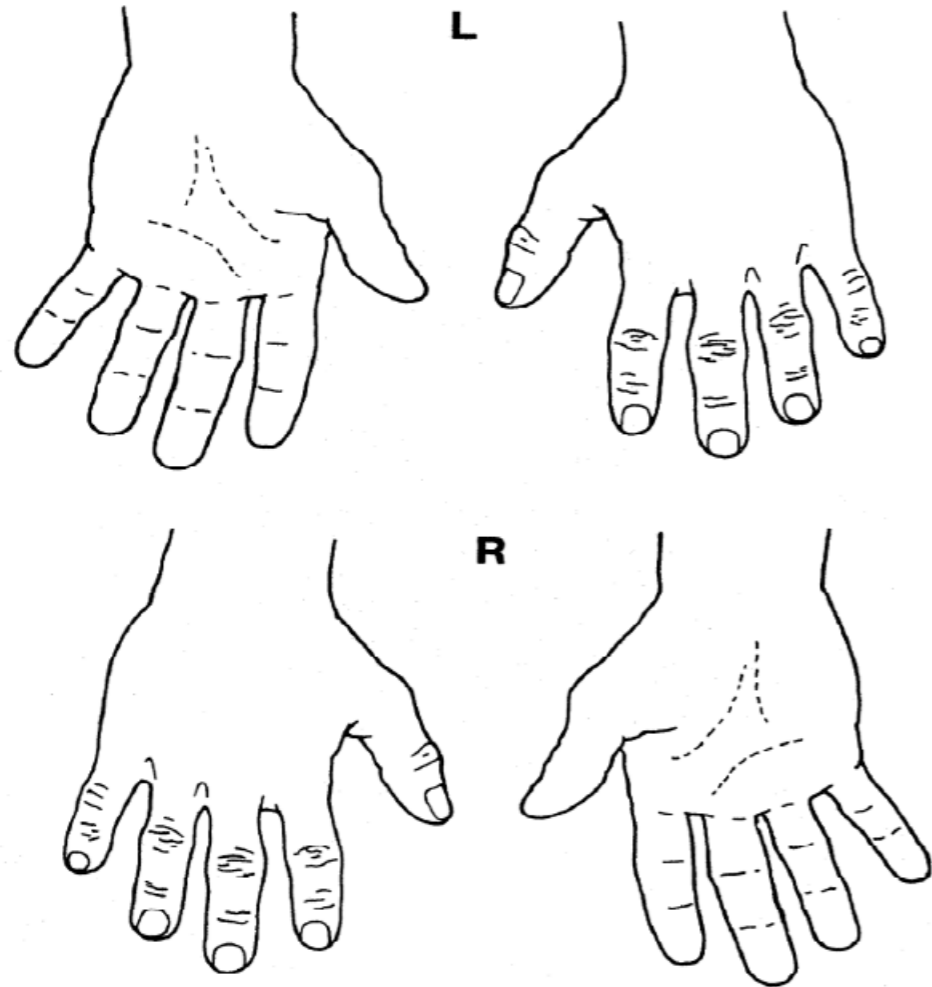
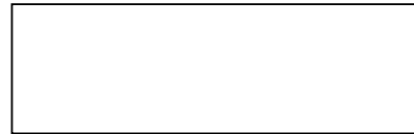
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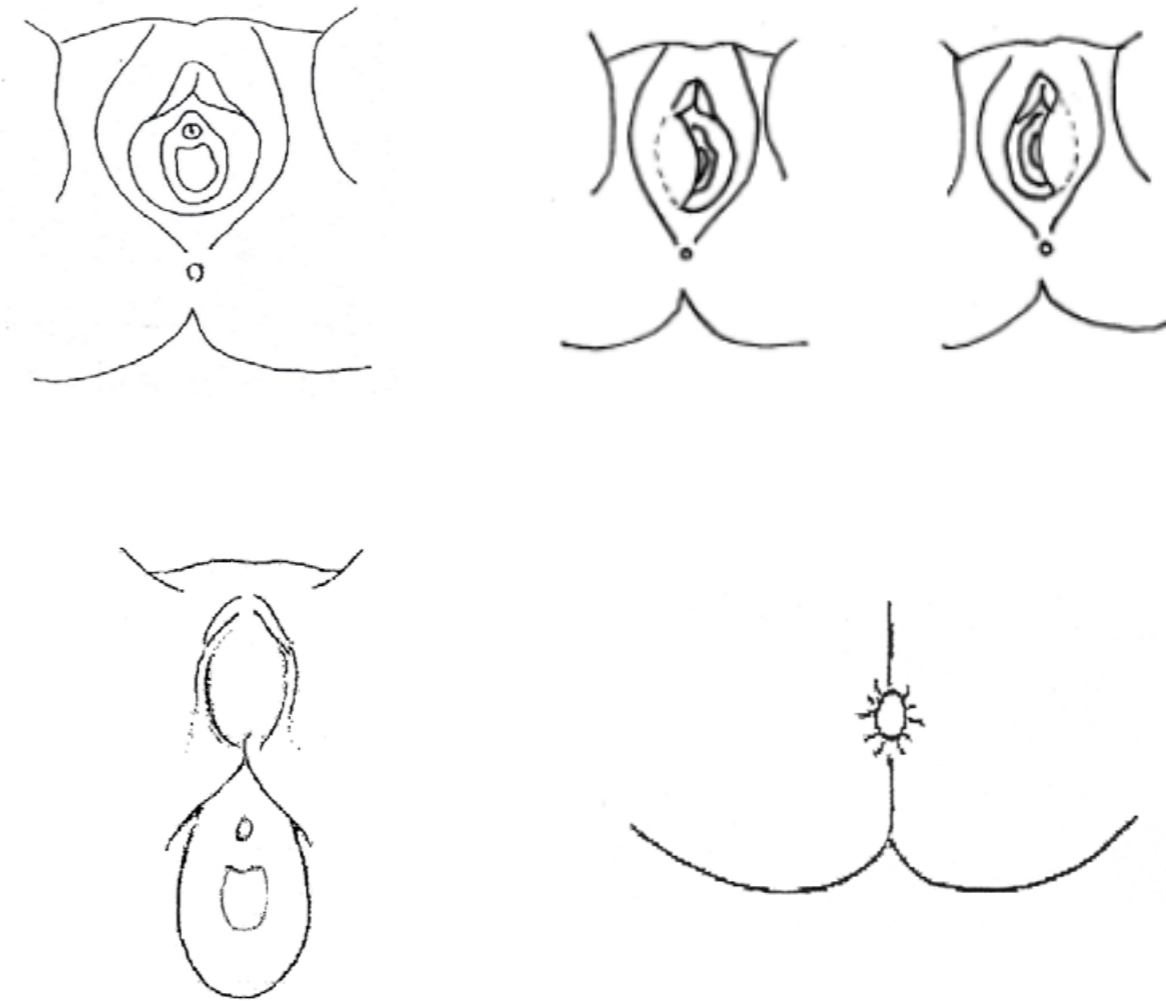
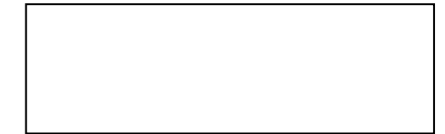
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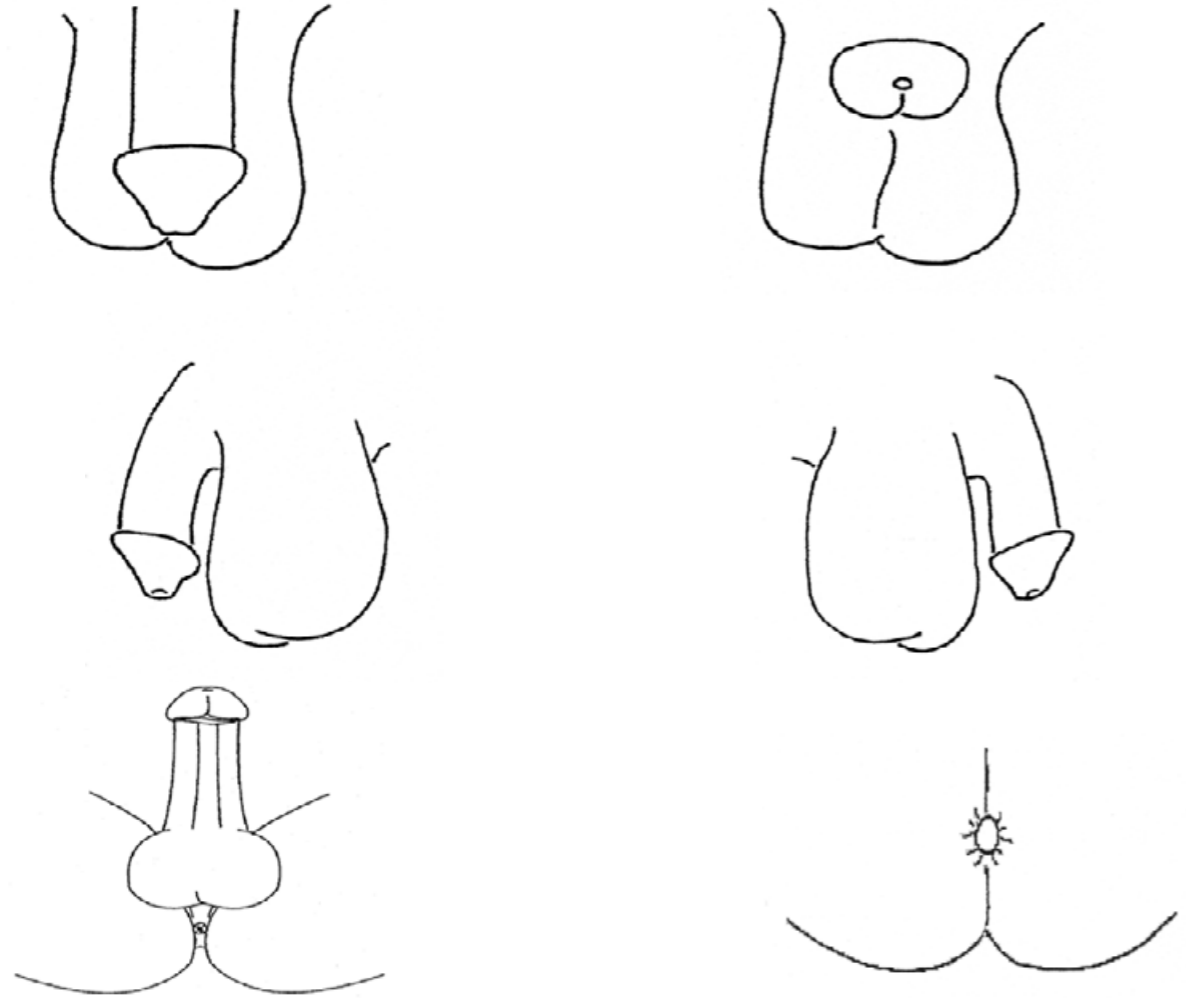
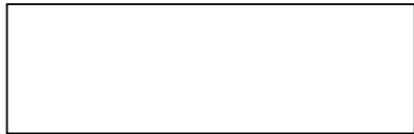
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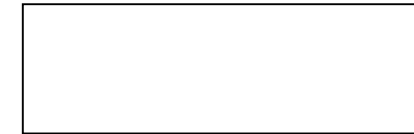
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Initials: _____ /Date: _____



Determining Necessity for Baseline STD Testing In Children			
Test if "Yes" to Any of the Following:			
	No	Yes	Unknown
Genital discharge, itching, odor, ulcers, or lesions or painful urination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suspected assailant known? If so, do they have any known STDs or a high risk, including IV drug use, multiple partners, previous STD, etc.?	<input type="checkbox"/>	<input type="checkbox"/> Describe: _____	<input type="checkbox"/>
Any one else in the child's household (all locations patient resides) with an STD?	<input type="checkbox"/>	<input type="checkbox"/> Describe: _____	<input type="checkbox"/>
Disclosure by child or caregiver of genital, anal, or oral penetration?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Known or suspected ejaculation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Child or caregiver requesting testing?	<input type="checkbox"/>	<input type="checkbox"/> Requestor: _____	<input type="checkbox"/>
Multiple assailants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DATE	TIME	ORDER	TIME NOTIFIED	NURSING SERVICE SIGNATURE
		<input type="checkbox"/> See ED Record for Data		
		Allergies:		
		<input type="checkbox"/> NKDA		
		Height _____ in / cm Weight _____ lb / kg		
		If the plan of care determined includes baseline STD testing		
		<input type="checkbox"/> HIV antibody		
		<input type="checkbox"/> Rapid Plasma Reagin		
		<input type="checkbox"/> Hepatitis C antibody		
		<input type="checkbox"/> Hepatitis B core antibody		
		<input type="checkbox"/> Hepatitis B surface antibody		
		<input type="checkbox"/> Urine NAAT (nucleic acid amplification) for Gonorrhea and Chlamydia		
		<input type="checkbox"/> Bacterial Vaginosis/Vaginitis Panel (for prepubertal patients swab external discharge only)		

Physician's Signature:

PLACE LABEL HERE	PHYSICIAN'S TREATMENT RECORD ED REPORTED SEXUAL ASSAULT/ABUSE PEDIATRIC STANDING ORDERS
------------------	------------------------------------------------------------------------------------------------------------------------------------------

Initials: _____ /Date: _____

Evaluation/Treatment Provided

Outpatient Laboratory: Yes No
 Prescriptions: Yes No

If outpatient services recommended, describe here: _____

Medical Advocate/Child Protective Services Present to address safety plan Yes No

Safety Plan Checklist for Discharge (if not done by advocate or child protective services):

YES NO

_____ 1. Has a safe place to go upon discharge, and is able to identify alternatives if this place becomes unsafe.
 _____ 2. Discuss basic safety @ home/public areas.
 _____ 3. Identifies a support person.
 _____ 4. Information given about counseling options and the benefits of getting counseling.

Other safety issues addressed here: _____

Discharge Vital Signs: Temp _____ Heart Rate _____ Respiratory Rate _____ Blood Pressure (age 5 and up) _____

Additional Information

The examiner handling your case is: _____

If you need to reach your examiner:
 York: 717-851-2311
 Gettysburg: 717-337-4299

Examiners are not on-site at all times. Please leave a message and someone will get back to you by the next business day.

The victim services center in your area is:
 YWCA Victim Assistance Center (717)854-3131
 Survivors (717) 334-9777

The Police Department Notified: _____
 Department Phone Number: _____

With your permission, a nurse will contact you to check on your status Yes No
 Phone number to call _____ OK to leave a message Yes No

Additional Instructions: _____

This information is a guide to your care following an examination for sexual assault and is to be used in conjunction with any additional information provided to you by your examiner and/or primary healthcare provider. Please bring discharge instructions to your follow up appointment.

Discharge Instructions Provided

Signature	Initials	End Time

