Metabolic and Endocrine Disorders

Shaken Not Stirred: Alcohol Withdrawal

Faculty: Shannon L. Toohey, MD, FACEP

He was in the ED "just sleeping it off", but now he's in full withdrawal. The speaker will review the current preventative treatments & management strategies for the patient in alcohol withdrawal. Various assessment scales & treatment algorithms that are available will also be discussed.

- Describe the pros & cons of the various assessment scales used to manage alcohol withdrawal.
- Discuss how to recognize the impending alcohol withdrawal patient.
- Discuss aggressive treatment options available for the alcohol withdrawal patient & in the era of drug shortages.

Acid Base That Actually Matters: A Case-Based Approach

Faculty: Christopher Hahn, MD

Acid-base rules are easily mastered, but when does pH really matter? During this interactive "choose your own adventure" discussion, the speaker will lead you down the rabbit hole of hydrogen ions into an emergency wonderland where pH status actually makes a difference. Utilizing patient cases from toxicology, metabolic disorders, trauma, & other emergencies, the speaker will guide you & your patient safely beyond the Henderson Hasselbalch equation by providing a common sense approach to acid base emergencies that actually matter.

- Define the pathophysiology of acid base disorders utilizing the clinically relevant strong ion approach.
- Explain an effective strategy for rapid diagnosis utilizing clinical presentation, traditional blood tests, & other techniques.
- Outline lifesaving therapeutic strategies to safely treat & prevent acid base disorders.

Deadly Dialysis: A Review of Dialysis Complications and Their Initial Management

Faculty: Shannon L. Toohey, MD, FACEP

There are 468,000 patients on dialysis in the US and these patients commonly present to the community emergency department with complications. Understanding the common complications and treatments is essential for the emergency physician. The speaker will review the most common dialysis complications (infection, metabolic derangement, vascular access issues) and their acute treatments.

- Review the most common presenting complications in dialysis patients,
- Discuss acute treatment of dialysis complications.
- Review the latest evidence-based practices for dialysis complications presenting to the ED.

DKA & HHS: The Sweetest High-Yield Pearls & Pitfalls

Faculty: Christopher Hahn, MD

Diabetic ketoacidosis & hyperosmolar syndrome are the most common life-threatening complications of the growing epidemic of diabetes in the US. Timely recognition is essential to initiating appropriate management in the ED. Careful attention to fluid administration, electrolyte replacement, & insulin therapy is essential to reducing hospital length of stay & complications. During this case-based interactive discussion, the speaker will review cases of diabetic emergencies. Important similarities & differences in pathophysiology & management will be reviewed. Best evidence will be summarized in practical strategies to bring back to your ED.

- Discuss the unique pathophysiology DKA & hyperosmolar syndrome in the ED.
- Outline diagnostic strategies and introduce euglycemic DKA.
- Compare evidence-based yet practical treatment plans to get the sugar down & the patient home.

Glands Gone Bad! Endocrine & Metabolic Emergencies

Faculty: Steven T. Haywood, MD

“I’m weak & dizzy, I’m hot & bothered, I’m cold & have no energy." Vague complaints often lead to extensive & expensive ED workups. While patients with metabolic disorders frequently present to the ED, most endocrine disorders present less often. The speaker will review how to recognize & treat adrenal insufficiency, hypothyroidism, thyroid storm, hyperparathyroidism, new onset diabetes mellitus, & metabolic syndrome.

- Discuss the presentation, management & disposition in cases of hypothyroidism.
- Discuss the presentation, management, & disposition in cases of thyrotoxicosis.
- Discuss the presentation, management & disposition in cases of adrenal insufficiency.
- Review new onset diabetes mellitus, & metabolic syndrome.

Kidney Krunch: Renal Issues That Matter

Faculty: Mary E. McLean, MD

The kidneys work hard to filter blood & produce urine. As an emergency physician you seen patients every day with varying stages of renal disease. What are some of the considerations we need to think about treating patients with & without renal disease. We will discuss important issues such as criteria for dialysis, managing AKI, iodine contrast administration in the healthy & compromised kidney, and considerations regarding nephrotoxic medications.

- Discuss when we should send a patient for dialysis, is there a specific set of criteria.
- Discuss the criteria for and management of AKI.
- Discuss Iodine contrast administration in the healthy & compromised kidney.
- Explain considerations regarding nephrotoxic medications.

Lytes Out! Electrolytes Gone Wrong

Faculty: Corey M. Slovis, MD, FACEP

Electrolyte emergencies often present with subtle clinical manifestations yet may culminate in a near death experience for the patient & clinician! Six short lectures which will cover signs, symptoms, & treatment for the following electrolyte abnormalities: hyponatremia, hypernatremia, hypokalemia, hyperkalemia, hypercalcemia, & hypomagnesemia.

- Discuss presentation, management, & disposition in cases of hypo & hypernatremia.
- Discuss presentation, management, & disposition in cases of hyper & hypokalemia.
- Discuss presentation, management, & disposition in cases of hypercalcemia & hypomagnesemia.

The Magic of Magnesium

Faculty: Amy F. Ho, MD

Magnesium is a fascinating dose-dependent drug with many variable uses in the emergency department. The speaker will review how and when to use magnesium for atrial fibrillation and tachydysrhythmias, migraines, preeclampsia, torsades, reactive airway disease, and electrolyte disorders.

- Describe the doses and routes of magnesium for different clinical indications.
- Explain clinical use of magnesium for different indications as to when the consider magnesium.
- Describe the lab evaluation of hypo and hypermagnesium and discuss safe repletion.