Pediatric Neurologic Examination Quiz Answers

1. d. Frequently, children will have an upgoing plantar reflex until they are walking-around 12 months. However, they also have a grasp reflex of both their hands and feet, so if you stroke the middle of the foot instead of the side, they may have a plantar grasp, with the toes going down instead.

2. b. Generally by age 5 yrs, kids can do a tandem gait. Around 1 they should walk, by 2, they should be able to stand briefly on one foot, and by 3, hop 2-3 times, so these can be used in younger children to test balance.

3. Scissoring and truncal hypertonicity. Babies who are trying to kick you away can seem surprisingly strong. While they are resting, holding their legs crossed in a "scissors position" is frequently abnormal. Also, when you turn the baby from back to front by pulling on one arm, he/she should move in sections- chest first, then abdomen, then diaper area. If they roll over all at once, like a log, this is abnormal.

4. Yes: Deaf children tend to vocalize normally until 6-8 months, then fail to progress.

5. Not necessarily. Clearly a question for their general pediatrician, but you can reassure them that 5-15% of normal toddlers head bang. Other signs of autism include delayed language, echoing what is said rather than reciprocal language, and lack of pretend play or play with other children.

6. Its very difficult- one ortho text suggests that if the child is able to sweat, then sensation should also be intact.

7. c. Although its recommended to try vision screening at age 3, generally children can read a standard eye chart by 4 yrs (in a developmentally average child). However, if they don't know all their letters, a picture or tumbling E chart may be helpful. They should be able to identify pictures by 18 mo if just held up to them.

8. No. By birth in a term infant, despite a visual acuity of 20/400, they should be able to fix on mom's face and blink in response to light. However, blinking to threat doesn't develop until 5 months.

ADD'L QUESTION 1: You slightly drop the head of a baby and he responds with arm extension and abduction, followed by arm flexion and a cry. What is this called and in what age groups is it normal?

ADD'L ANSWER 1: This is a description of the classic Moro reflex which can be elicited by slightly dropping the supported head of the baby, pulling on their arms then releasing, and sometimes just by startling them. It begins at birth and continues until 3-6 months. Parents may present to the ED thinking that their newborn is having seizures.
ADDL QUESTION 2: An otherwise asymptomatic 2 week old has brisk reflexes and 10 beats of clonus at the ankle. What labs should be checked?

ADDL ANSWER 2: None, this is normal in the newborn and can continue for up to a year. If the child has no other signs of jitteriness, developmental delay, or hypertonicity, this can be a normal physical examination finding.

ADDL QUESTION 3: When does the palmar grasp reflex diminish? a) 2 mo b) 4 mo c) 6 mo d) 1 yr

ADDL ANSWER 3: b) At birth there is a palmar grasp of both the hand and foot, which is generally gone by 4 mo