American College of Emergency Physicians
Section of Pediatric Emergency Medicine

Pediatric Seizures Quiz 5/03

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1. A 2-1/2 year old child has a 5 minute generalized tonic-clonic seizure with a fever of 102. Examination reveals a right otitis media, no nuchal rigidity and normal mental status one hour after the event. Neurodevelopmental status is normal. Family history is positive for maternal febrile seizures. This is the child's first seizure. Which of the following statements are true?
   a. Phenobarbital should be initiated.
   b. A lumbar puncture should be performed
   c. An EEG should be performed in one week
   d. The risk of recurrence of a febrile seizure in this child is approximately 30%.

2. What is the fastest rate that phenytoin can be administered intravenously in a child?
   a. 1mg/kg/min
   b. 50mg/min
   c. 3mg/kg/min
   d. 2mg/kg/min

3. All of the following statements are true Except:
   a. Fosphenytoin can be given at an IV rate of 3mg/min.
   b. Felbamate has been associated with aplastic anemia and liver toxicity.
   c. Lamotrigine can lead to rash development, however there is no report of serious skin disease.
   d. Fosphenytoin cannot be given IM due to severe pain at the injection site.

4. Simple febrile seizures are defined as all of the following Except:
   a. Generalized seizure lasting < 15 minutes
   b. Only two seizures in a 24 hour period
   c. No evidence of CNS infection
   d. Age range 6 months to 5 years.

5. Which of the following is not a risk factor for febrile seizure recurrence?
   a. Age less than 24 months of age with onset of first febrile seizure
   b. Age less than 12 months of age with onset of first febrile seizure
   c. Temperature less than 40C with febrile seizure
   d. Family history of febrile seizures

6. List the pediatric doses of the following medications:
   a. Lorazepam_____mg/kg
   b. Diazepam: rectal_____mg/kg, IV_____mg/kg

c. Loading dose of phenobarbital_____mg/kg
d. Loading dose of phenytoin_____mg/kg
e. Loading dose of fosphenytoin: IV/IM_____mg PE (phenytoin equivalents)/kg
f. Midazolam: rectal_____mg/kg: IV_____mg/kg: IM_____mg/kg

7. A 3-month old female presents with a generalized seizure which has been present for 25 minutes. The seizure is refractory to rectal valium given by the paramedics and Ativan in the ED. Her temperature is 36.5C. There is no sign of trauma. Mother reports that she just started the baby on formula this week. All of the following are true except:
   a. The mother should be questioned regarding exact formula preparation
   b. Hyponatremia may be corrected by using 4-5cc/kg of 3% saline
   c. Patients with hyponatremic seizures tend to have higher temperatures than infants with seizures due to other causes
   d. Patients with hyponatremic seizures typically have prolonged seizures

8. The risk of development of epilepsy in the general populations is approximately 1% by age 7 years. In children with simple febrile seizures, the incidence of epilepsy is:
   a. No different that the rate in the general population
   b. Only slightly higher than the rate in the general population
   c. 30-50 times that of the general population
   d. 10 times that of the general population

9. The latest ACEP article on febrile seizures recommends the following in regards to lumbar puncture for patients with febrile seizures:
   a. All patients less than 12 months of age should undergo lumbar puncture
   b. All patients less than 18 months of age should undergo a lumbar puncture
   c. A lumbar puncture can be deferred in patients less than 18 months of age with a simple febrile seizure if the patient is well-appearing
   d. A CT scan should be performed prior to performing a lumbar puncture

10. Which of the following causes of gastroenteritis have been associated with seizures?
    a. Salmonella
    b. Shigella
    c. Campylobacter
    d. Rotavirus

11. Which of the following is the most common cause of seizures in children?
    a. Fever
    b. Head injury
    c. Metabolic disturbances
    d. Hypoxia
    e. Ischemia

12. Which of the following is the drug of choice for neonatal seizures?
    a. Phenytoin
    b. Fosphenytoin
    c. Valproic acid
    d. Phenobarbital