PEDIATRIC SEIZURES

UPDATED: 3/08/2012

KJW
WEBER, MD

D. WILSON, MD

Specific information needed:

1. History -- onset, duration of seizure, description of seizure activity, fever, recent illness.
2. Past history -- immunizations, medications, previous seizures, diseases.

Specific objective findings

1. Vital signs.
2. Level of consciousness.
3. Fever, skin warmth, rash.
4. Signs of trauma.

Treatment

1. Ensure airway, suction as needed.
2. O_2, moderate flow (4-6 L/min). Titrate to pulse oximetry > 90%.
3. Remove excess clothing if patient feels febrile.
4. Keep patient on side. Protect from injury during confusion or further seizure activity.
5. If seizure persists or patient not alert:
    a. IV NS. Start enroute at TKO.
    b. Test blood for glucose level and administer dextrose if glucose level < 60 mg/dl (see dextrose protocol).
    c. Administer benzodiazepine if seizure activity persists. Benzodiazapines may need to be administered rectally if IV access not available. Be prepared to intubate if respiratory depression significant (see benzodiazapine protocol).
6. Monitor vitals carefully enroute. Keep patient on side.

Specific precautions

1. If patient is obviously febrile, you may use cool, wet towels during transport. DO NOT DELAY TRANSPORT FOR COOLING. Unbundling is often sufficient.
2. Unlike the adult with a diagnosis of epilepsy, a child who has had a seizure, even though alert on arrival of the paramedics, usually requires medical attention. He is best transported by ambulance. Do not be falsely reassured by return of normalcy. This is *not* true of the patient who has a history of seizures and is under the care of a physician for those seizures. Those patients can often be managed at home. The question must be asked, however, why emergency care was called for. Was this an unusual seizure? Or was this just an inexperienced (new) caretaker?
3. Seizures in children may not be the usual grand mal type. A staring, peculiar eye movement, unresponsiveness, or arm twitching may be the only clue. The parents are usually very sensitive to the abnormality and potential seriousness of the situation. Do not downplay their concerns.
4. Do not make the diagnosis of "febrile seizures" in the field. This diagnosis cannot be made until other causes are excluded. An important cause of seizures in childhood is meningitis (also associated with a fever). Other forms of encephalitis, head trauma, and epilepsy must also be excluded.
5. If the diagnosis of meningitis is made in the patient at a later time, be sure to check with the receiving hospital concerning the need for prophylactic antibiotics for the prehospital providers. This is usually not necessary if there was no mucous membrane contact with the patient (e.g., mouth-to-mouth breathing).