Think febrile seizure? Think again...

By Susan Poole, RN, and Amanda Luffman, RN, BSN

The seizing baby was brought into our room with mom, dad, and grandma. We cut off his clothes, obtained vital signs, and connected him to our cardiac monitor while our paramedic student maintained the child's airway on highflow oxygen. The babe's temperature was over 39 rectally, with an elevated heart rate between 180 and 200 bpm. He had laboured respiration and a normal Chemstrip of 9.1 mmol/L. The chest sounds were clear, and mom denied any recent cold or flu in the child. She stated her son just woke up with a fever after naptime and began seizing.

Our emergency physician immediately ordered rectal Valium and Tylenol after a Braslow weight was obtained. However, the child continued to seize. IV access was initiated twice, the child was suctioned, the respiratory therapists were called, and a urine bag was applied. Blood work was drawn and a Stat chest x-ray was completed.

We noted stridorous breathing in the child, and prepared for rapid sequence induction and intubation. After the respiratory therapist intubated the seizing child, we continued to push sedatives intravenously, administered Advil rectally, and started an infusion of Cefuroxime after noting an elevated white count of 18.4.

The child finally quit seizing for a short period of time. Nearly 45 minutes after he was brought in, we noted decorticate posturing. The child's parents had denied any prior trauma. After reassessment by the emergency physician, a Stat unenhanced CT of the head was ordered. The child began seizing again. We noted short runs of ventricular tachycardia (V-Tach) while attached to our transport monitor. We nervously prepared for defibrillation while our paramedic student continued bagging and we continued transporting our patient down the hallway to CT.

The CT was normal and we returned to the patient's room. We observed periodic short runs of V-Tach. The child produced 30 cc of urine, which was collected in a U-Bag; samples were sent to the lab. Urinalysis and C&S were initially ordered, but some quick thinking led to adding a triage urinalysis for toxicology.

As our shift ended, the babe was attached to a ventilator and the respiratory technician was drawing ABGs. Although we had done our best in caring for the child during our shift, neither of us slept well that night, wondering what would happen to the infant. Upon return the next morning, we found out the baby's urine had tested positive for cocaine, he had been ambulanced by helicopter to another facility, and social services had apprehended all other children in the family.

A diagnosis of febrile seizure had boldly flashed across our minds when the infant was initially brought in, especially with the child's elevated temperature. However, we began to question our original assumption as the treatment proved ineffective and other signs such as decorticate posturing emerged. When the CT of the head was normal, we began to think outside the box and question, "What more could be occurring?"

As the child's urine came back positive for cocaine, we both learned firsthand the valuable lesson: *never assume anything*, *while expecting and being prepared for everything*.

Had an adult patient come into our department with the same presentation as this child, acute drug ingestion would have crossed our minds more readily, while ingestion of cocaine in this age group is not the norm (Havlik & Nolte, 2000). With cocaine-related diagnoses increasing, emergency nurses should be prepared for anything (Regina Qu'Appelle Health Region Addictions Services, 2006). As noted by Brubacher and Hoffman (1997), children may be exposed to cocaine through accidental ingestion, second-hand smoke inhalation of crack cocaine, or intentional poisoning by family members. Because symptoms of cocaine toxicity can also include hyperthermia and seizures, we must not automatically assume febrile seizures (Brubacher & Hoffman, 1997).

Our second lesson learned in this case was to *always trust our instincts*. Never hesitate in reporting your findings and make suggestions to the physician. We communicated everything to our emergency physician, who was very receptive and listened to our concerns. In this case, suggesting to him the need for a urine triage may have saved the life of this child.

References

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