Child development know-how unmasks child abuse cases

Pediatric News, July 1, 2002

WASHINGTON -- Primary care physicians are in the best position to identify certain cases of child abuse because of their understanding of child development, Dr. Cindy Christian and Dr. Randy Alexander agreed in a joint presentation at the annual meeting of the American Professional Society on the Abuse of Children.

It's very common in child abuse cases for parents to claim that the children somehow managed to cause their own injuries. A pediatrician or family physician who is well versed in children's developmental abilities can determine whether the parents' explanations are plausible, said Dr. Christian, director of the child abuse program at Children's Hospital of Philadelphia.

She presented the case of a 4-month-old girl who was seen because of severe fussiness. The baby was found to have otitis media and was discharged with a prescription for amoxicillin, said Dr. Christian, also of the University of Pennsylvania, Philadelphia.

She returned to the emergency room the next day. The mother reported that the baby was crying constantly, wouldn't eat, and had a cough. On physical exam she was found to have severe difficulty breathing and tachypnea. Chest x-ray revealed foreign bodies in her esophagus. One dime and six pennies were removed surgically.

The mother said that she had accidentally emptied a piggy bank full of coins into the baby's crib and had thought she had recovered them all, but must have missed some. She was extremely distraught that she had left behind some coins and the baby had apparently swallowed them.

The patient did well and was discharged home, and the family was enrolled in a visiting nurse program and signed up for parenting classes. It is unclear whether the hospital staff believed the mother's explanation, Dr. Christian said.

One month later, the mother found the baby dead in her crib and called paramedics. They noted that the mother had a black eye, but she did not disclose any abuse.

“We all know that the same person who abused this baby is the one who abused this woman, but she was covering for him. This serves as a reminder that in at least 50% of child abuse cases, there is other domestic violence going on,” Dr. Christian said. Autopsy revealed fractures of the baby’s arms and more coins in her esophagus. Although the death was ruled a homicide by child abuse, the medical examiner couldn’t determine the exact mechanism of death.

“Try prosecuting that in court, when you don’t even have a cause of death,” she noted. Dr. Alexander said that a physician who understood child development would have realized immediately that the mother’s explanation for the coins in the esophagus was implausible. No child of that age has the fine motor coordination necessary for picking up and ingesting six coins on her own.
A 4-month-old has only a raking grasp and could only rake the coins toward her mouth. The pincher grasp necessary for this feat doesn’t develop until 8-10 months of age, said Dr. Alexander, director of the center for child abuse at Morehouse School of Medicine, Atlanta.

Dr. Christian noted that many physicians evaluating children with questionable injuries fail to do an adequate oral examination. “There are many individual reports of esophageal, oral, and hypopharynx injuries in child abuse cases, mostly from traumatic perforations when the child is forced to swallow a foreign body, or from burns from forced caustic ingestions.

“Very young children can also aspirate things when they are force-fed, so think about the possibility of forced feeding when a child presents with respiratory distress or infection, subcutaneous emphysema, or mediastinitis,” she said. Dr. Alexander added that a simple look at the frenulum can reveal forced feeding or forced aspiration, “yet most physicians don’t do it.”