Ingesting tiny batteries can lead to big problems

By TERRY RINDFLEISCH | 
June 16, 2010

Ingestion of lithium batteries, which children may mistake for candy and elderly adults for medication, is a surprisingly common problem, according to the medical journal Pediatrics.

Al Graewin of the La Crosse County Health Department recently passed along the article to me, wanting to make sure people around here realize the potential dangers.

According to the article, doctors thought 13-month-old Aidan Truett of Hamilton, Ohio, developed an upper respiratory infection last fall. He lost interest in food and vomited a few times, but doctors attributed it to a virus. After nine days of severe symptoms and more doctor visits, the hospital finally ordered an X-ray to look for pneumonia.
What they found was a “button” battery, one of those flat silver discs used to power remote controls, toys, musical greeting cards, hearing aids, bathroom scales and other home electronics.

The battery was surgically removed the next day, and Aidan was sent home.

But what the doctors failed to realize was that the battery’s current had set off a chemical reaction in the child’s esophagus, burning through both the esophageal wall and attacking the aorta. Two days after the battery was removed, Aidan began coughing up blood. He soon died from his injuries.

To this day, Aidan’s parents don’t know where the battery came from.

Such deaths are extremely rare — fewer than 10 documented during the past six years.

There are, however, about 3,500 cases of button cell battery ingestion reported each year to poison control centers. But while swallowing batteries has occurred for years, the development of larger, stronger lithium cell batteries has increased the risk of severe complications.

Data from the National Capital Poison Center in Washington found a seven-fold increase in severe complications from button cell ingestions in recent years.

Among the serious complications, the chemical reaction triggered by the batteries can damage vocal cords, leaving children with a lifelong whisper, and damage to the gastrointestinal tract means some children require feeding tubes and multiple surgeries.

“The injuries are so much more serious,” said Dr. Toby Litovitz, lead author of the two articles in Pediatrics. “It’s like drain opener or lye. It’s not something you want in the esophagus of your child.”

Federal safety rules require toys that use the batteries to have battery compartments that are locked with screws. But devices intended for adults — such as bathroom scales and remote controls — use a simple plastic cover that can fall off or be easily removed.

Litovitz said manufacturers of electronic products should secure the battery compartments in all devices, not just toys.

“Our major pitch is to get the industry to do something about the battery compartment, but parents also need to know that they need to be dealing with these batteries with a lot more vigilance and keeping them out of reach of the child,” Litovitz said.