

## **PRINT-Grateful family warns tiny batteries pose big risk**

As you prepare for the holiday season with lots of new electronics, a central Illinois family wants to make sure families keep small, circular lithium batteries that power many devices secure from children.

Joseph Mumbu lives in rural Trivoli, in central Illinois, with his wife Stacy and 5-year-old daughter Liana, who is among the thousands of kids who each year swallow shiny lithium batteries, also known as button batteries. It happened in an instant when Joseph was working in his home office and had a battery out to put into his car's key fob.

His energetic daughter was in the office when she suddenly darted out of the room after grabbing something from his desk. Initially Joseph wasn't concerned but he and Stacy began to worry when their daughter ran to the bathroom and started choking and crying.

"Obviously she had swallowed something. Then my wife and I started looking and wondering what it was she had swallowed. She was struggling with something that was stuck in her esophagus and starting to show signs of discomfort and pain."

Little Liana was struggling to breathe so Joseph and Stacy rushed her to the nearest hospital emergency department at Graham Hospital in Canton.

An X-ray quickly suggested it might be a button battery. The team at Graham immediately contacted the OSF CareHub – a centralized command center for transfers into OSF facilities that can provide advanced care. This initiated specialty services and alerted Dr. Daniel Robertson, a surgeon at OSF HealthCare Children's Hospital of Illinois in Peoria. Liana was then rushed by ambulance there, but first the team at Graham followed Dr. Robertson's recommendation to give the child honey. Recent studies show honey can create a protective barrier between the battery and tissue in the throat, as well as neutralizing the harsh alkaline levels.

Minutes make a difference because Dr. Robertson says saliva acts as an electric conductor.

### **Lithium batteries can cause serious damage, death**

*"When it's sitting in the esophagus, the battery gets activated, and it creates an electrical current which creates a burn. And people also wonder is there some chemical leakage too? It's all those things, so time is of the essence." Dr. Daniel Robertson, surgeon OSF Children's Hospital of Illinois*

Swallowed batteries can burn through a child's esophagus in just two hours, leading to surgery, and the possibility of months with feeding and breathing tubes, and even death. A team was standing by, ready to treat Liana as soon as the ambulance arrived at OSF Children's Hospital. As Joseph and Stacy waited for the battery to be removed, they worried about permanent damage, however Joseph recalls he was encouraged by Dr. Robertson's calm confidence before the procedure

"Miraculously and so nicely – when Liana went with Dr. Robertson, we thought we were going to wait for hours – and in 15-20 minutes, he came to us as was like, 'Here's the battery!' That was such a big relief, I can tell you that."

Joseph Mumbu credits Graham doctors with recognizing his daughter needed greater expertise than what they could offer and OSF HealthCare for coordinating the urgent response.

“The speed with which the care and the help was delivered, I mean for us, it was tremendous for the fact that when she was brought into here by ambulance so fast, they did not even wait at the lobby. To us it was very good, and we were very impressed.”

Liana suffered no permanent damage and was back to herself after an overnight stay. Her parents say the curious little girl is now very aware of what she puts in her mouth because of her scary experience. The family is so grateful and was happy to have the chance to reunite with Dr. Robertson to say, ‘thank you’ and show him little Liana is doing great.

Dr. Robertson urges families not to wait if they suspect a child has swallowed a battery or a magnet, which is also fairly common. He recently operated on a child that swallowed more than one magnet.

“If it fits in different groups of the intestine and the magnets get stuck together, then that erodes holes in the bowel. In fact, I just operated on that in the last month or two. So, magnets are another one that we really want to get the word out about – be careful with your magnets at home, especially those little round ones.”

The National Safety Council stresses button batteries can be found not only in key fobs, but small remotes, calculators, bathroom scales, reading lights, flameless candles, talking and singing books, singing greeting cards, watches, thermometers, hearing aids, and ornaments. Small magnets are also often found in games and toys.

With the holidays, Dr. Robertson suggests that now is a good time to carefully review your home as well as the homes of any caregivers for possible dangers from devices with button batteries or magnets. Ensure they’re out of sight and reach of children. If you suspect a child has swallowed one of the hazardous items, go to the emergency department immediately and don’t let your child eat or drink anything, except honey, and don’t induce vomiting.