

## A Fatal Case of Lithium Battery Ingestion in a 2-Month-Old Child: A Case Report

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### Dear Editor-in-Chief,

Ingestion of batteries by children became more frequent in recent years, due to the increasing accessibility of electronic toys and devices to children. Most of the cases befall in the pediatric age, mostly between 6 months and 6 years (1). We report a fatal evolution of battery ingestion in a 2-month-old boy. A 2-month-old boy presented to the pediatric emergency room 3 hours after the unintentional swallowing of a lithium battery. An X-ray revealed a radiopaque round object in the stomach (**Figure.1**). The esophagoscopy showed a 3rd degree ulcerative esophagitis of the cervical esophagus. Spontaneous emission of the battery was noted in 24 hours. The general state and the clinical examination were normal and the initial biological exploration was normal. So the patient was placed under intravenous antibiotic therapy, antacids, and steroids. On day 8, the patient presented an alteration of the respiratory state with abdominal bloating so an intubation was made. A CT-scan was done and it was normal. After extubating an upper digestive tract gastrografin swallow showed an esophageal stenosis with caustic esophagitis. A new alteration of the respiratory state was noted and the patient was newly intubated with chest X-ray showed an inhalation pneumonitis (**Figure.2**). The patient died within 24 hours.

Batteries lodged in the esophagus can cause severe tissue damage in just 2 hours with delayed complications (2). The majority of cases, 75%, occur before 4 years of age (3) cases of battery ingestion at ages inferior to 6 months (2 months for our patient) are extremely rare and ingestion is done accidentally and often with intervention of another person, in our case it is the older brother who putted accidentally the battery in the mouth of his little brother. The mechanisms of injury of esophageal battery impaction are various. A local toxic effect is due to mercuric oxide, which can be lethal (4). Despite this potential danger, complications in button battery ingestion case series are, fortunately, rare, and those that do occur mainly arise when the batteries fail to migrate beyond the esophagus because of the increased propensity for their course to arrest (5). In our case the time interval between ingestion and the spontaneous emission of the battery was between 24 and 36 hours. Lithium battery ingestion is a serious condition with high risk of life-threatening complications in childhood, and it can be fatal especially in extreme age, under 6 months. Urgent endoscopic removal is the best treatment to reduce the risk of morbidity and mortality.

**Key Words:** Child, Battery, Lithium.

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**Fig.1:** An X-ray revealed a radiopaque round object in the stomach.



**Fig.2:** Chest X-ray showed an inhalation pneumonitis.

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