Acquired Tracheoesophageal Fistula Due to Battery Ingestion

Eric M. Neverman, DO, MHA
Brooke Geyer, DO

From the Internal Medicine Pediatrics Residency Program (Dr Neverman) and the Division of Hospital Medicine in the Department of Child Health (Dr Geyer) in the School of Medicine at the University of Missouri in Columbia.

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Address correspondence to Eric M. Neverman, DO, MHA, 1 Hospital Dr, Columbia, MO 65201-5276.

E-mail: nevermane@health.missouri.edu

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A 16-month-old child presented to the emergency department with a persistent, nonproductive cough during the past 5 days. Occasional stridor was noted when the patient was agitated. A chest radiograph revealed a 20-mm proximal esophageal foreign body with a double ring sign, suggesting disc battery ingestion (image A). Endoscopic removal was performed, at which time extensive esophageal tissue injury was noted. The patient later developed aspiration pneumonia, and an esophagram showed an acquired tracheoesophageal fistula (image B). The child was treated conservatively with antibiotics and nutritional support, and the lesion resolved without further intervention.

In recent years, there has been an increase in injuries in children owing to disc battery ingestion.[1] Severe tissue injury can occur in a matter of hours,[1,2] resulting in devastating complications such as esophageal perforation, tracheoesophageal fistula formation, aortic arch perforation, pneumonia, and mediastinitis.[3] Physicians should look out for recurrent symptoms, because physical examination of an ingestion would be similar to other pathologic processes such as croup or an upper respiratory tract infection with a cough or respiratory distress. Accordingly, physicians must maintain a high index of suspicion for foreign body ingestion. The presence of the double ring sign would suggest the ingestion of a disc battery; if found, disc batteries must be promptly removed to avoid further tissue injury. (doi:10.7556/jaoa.2016.037)

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