

A Brief Note on Cardiac Complications in Children

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Introduction

A Foreign Body (FB) may become lodged in the thoracic oesophagus after being ingested. The atria of the heart are in close proximity to the lower portion of the oesophagus. Infections and/or hemodynamic problems are uncommon, although they can be fatal. Pericarditis and/or endocarditis have been related to the isolation of uncommon microbes. Recurrent febrile sickness, reduced appetite, or non-descript constitutional symptoms are common in young children, but they are frequently unable to provide descriptive information that would aid in a rapid diagnosis. The commencement of pain localization to the oropharynx, chest or abdomen or the onset of dysphasia all of which are related to the time of FB intake are missing. When an Esophageal Foreign Body (EFB) erodes through the oesophagus, penetrates the pericardial sac, migrates to the myocardial surface, or even proceeds into the heart chambers, it can cause inflammation, infection, or haemorrhage [1].

According to the American Association of Poison Control Centers, 75% of foreign bodies eaten occur in children under the age of five. Children are more likely than adults to swallow FBs because they explore with their mouths do not distinguish between edible and inedible objects, lack molars that aid in chewing correctly and distracted when eating. Adults may experience dysphagia, a persistent odd sensation, blood tinged saliva, and a history of choking or gagging during meals, whereas children may simply refuse to eat, salivate, look to have swallowing pain or vomit repeatedly [2].

The oropharynx of a neonate, which is restricted by the tongue and pharyngeal tonsils, can sometimes stop FBs from entering the oesophagus. FBs that make it into the oesophagus usually pass through the gastrointestinal tract 79 to 90%; 11 to 21% require non-operative management and about 1% require surgery. Ingested FB can induce impaction, blockage, or perforation in the oesophagus, especially near anatomic constriction such as the upper esophageal sphincter, the aortic arch/left mainstem bronchus, or the lower esophageal sphincter. Esophageal FBs lodge in the cervical oesophagus right below the cricopharyngeus in 75.9% of 1224 cases and the lower oesophagus in 0.65% of instances, according to a survey of both adults and children [3].

Perforation occurs in fewer than 1% of ingested FBs, however when sharp pointed FBs are examined, perforation can occur in up to 35% of cases. EFBs induce esophageal wall penetration/perforation in about 1% to 4% of instances in adults; sharp, elongated fish bone EFBs, on the other hand, pierce the oesophagus in > 50% of cases. Seafood bones have consistently been identified as the most common ingested sharp foreign body in Asian children due to a rich diet in fish. The most of fish bones fortunately, impact tissues at or around the top of the upper oesophagus. Sharp items accounted for 10% of all FB ingestions in a 1993 prospective analysis of 244 children with FB ingestions in the United States. Straight pins, safety pins, bristles, and pine needles were the most commonly eaten sharp things. Between 1995 and 2015, nails, screws, tacks, and bolts were found in 6.3 percent of 759,074 suspected or confirmed FB ingestions in children aged 6 years [4].

Coins, tiny balls, and button batteries are examples of swallowed

EFBs with smooth edges. When an esophageal perforation occurs, a combination of local inflammation and protracted direct pressure necrosis is thought to be the cause. Coined-shaped button batteries cause obvious tissue damage more quickly. Within 15 minutes of direct tissue contact, a flow of electrical current at the battery's negative pole hydrolyzes to produce hydroxide.

When button batteries fall into the oesophagus, they can cause harm to the esophageal wall and deeper tissues. A 3-year-old boy with an affected button battery in the lower oesophagus developed EPF and a pneumopericardium.

In children, sonography has recently been utilized to detect esophageal foreign bodies. The cervical and thoracic oesophaguses, as well as the gastroesophageal junction, can be assessed with this technique. This provides the obvious benefits of speedy bedside examination and radiation avoidance [5].

Conclusion

Frequent consumption of FBs in young children puts them at a higher risk of esophageal perforation and pericarditis. Endocarditis can be caused by objects invading the atria of the heart. Ultrasound may detect radiolucent EFBs more easily and quickly. Ingesting a button battery with a narrow side pointed ventrally can cause serious damage to the oesophagus wall and deeper tissue; button batteries can also cause heart issues.

References

1. Patel MR, Piazza CC, Martinez CJ, Volkert VM, Christine MS (2002) An evaluation of two differential reinforcement procedures with escape extinction to treat food refusal. *J Appl Behav Anal* 35: 363-374.
2. Bernard-Bonnin AC (2006) Feeding problems of infants and toddlers. *Can Fam Physician* 52: 1247-1251.
3. Davies WH, Satter E, Berlin KS (2006) Reconceptualizing feeding and feeding disorders in interpersonal context: the case for a relational disorder. *J Fam Psychol* 20: 409-417.
4. Poppert KM, Patton SR, Borner KB (2015) Systematic review: mealtime behavior measures used in pediatric chronic illness populations. *J Pediatr Psychol* 40: 475-486.
5. Silverman AH, Tarbell S, Roberts MC, Steele RG (2009) Pediatric feeding problems, under nutrition, and vomiting disorders. *Handbook of Pediatr Psychol* 40: 429-445.

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