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CASE REPORT

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# Foreign body esophagus in a young infant

**Shafkat A. Lone MBBS, MS, Associate Professor**[1] | **Abdul Hameed MBBS, MD, Professor**[2] | **Farooq A. Shiekh PhD, Associate Professor**[3]

[1]Department of Otorhinolaryngology, Head & Neck Surgery, Government Medical College (GMC), Baramulla, India

[2]Department of Anesthesia, Government Medical College (GMC), Baramulla, India

[3]Department of Biochemistry, Government Medical College (GMC), Baramulla, India

**Correspondence**
Shafkat A. Lone, Department of Otorhinolaryngology, Head & Neck Surgery, Government Medical College (GMC), Baramulla, Kashmir, India.
Email: shafkatlone786@gmail.com
Farooq A. Shiekh, Department of Biochemistry, Government Medical College, Baramulla, Kashmir, India.
Email: shiekh.fa@gmail.com

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**Abstract**

Unattended children, mostly from low-socioeconomic contexts, who present with sudden onset obstructive respiratory and/or gastrointestinal symptoms, should be at high suspicion for foreign body ingestion. Prompt diagnosis helps avoid mismanagement and can potentially avoid dire outcomes.

**KEYWORDS**

baby, children, clinical case, clinical note, earring, foreign body esophagus, unusual case

## 1 | INTRODUCTION

Ingested foreign body (FB) in the upper aerodigestive tract can account for a significant portion of "on-call" activities, in one report up to 30% of out-of-hour referrals to ear, nose, and throat (ENT) staff.[1] Foreign bodies are a fairly common occurrence among pediatric ages, the elderly, and those with dentures or local diseases of the pharynx or esophagus, with coins being the most frequently ingested foreign objects.[2-6] Generally, these events are accidental, but are occasionally homicidal in nature.[7] Swallowing a complete earring below 3 months of age has been only rarely reported, and in such cases, prompt diagnosis and clinical intervention could potentially avert serious morbidity and mortality. Here, we report the case of a 2-month-old baby boy that presented with a large piece or jewelry (earring) impacted in the upper one-third of his esophagus.

Institutional Review Board (IRB), GMC & Associated Hospital, Baramulla.

This case report was approved by Institutional Review Board (IRB), GMC, Baramulla, because the patient presented in the Emergency, Department of ENT and went through a non-invasive procedure as per guidelines without any ethical issues.

## 2 | CASE REPORT

A 4.5-kg 2-month-old male child from a low-socioeconomic status family that resided in a remote rural area with a limited access to advanced healthcare center reported to the Emergency Department of ENT, Government Medical College (GMC) and Associated Hospital, Baramulla, India, with the chief complaints of vomiting, poor feeding, drooling, and difficulty in breathing for 3 hours. Prior to this, the baby had been left unattended at home along with his 3-year-old sibling.

On physical examination, the patient's pulse was 120/min, BP 70/50, and respiratory rate 40/min. He showed signs of inspiratory stridor and decreased air entry while lying flat. A foreign body was suspected; thus, X-ray examination of the neck (anterior-posterior (AP) and lateral) was obtained which revealed an opaque foreign body of unusual shape lying in the upper one-third lumen of the esophagus near T1-T3 (Figure 1A and B), interpreted by several radiologists to represent an earring or elongated object with small beads (Figure 1C). Physical examination revealed no other significant abnormalities.

Thus, rigid endoscopy (hypopharyngoscopy) was subsequently performed under general anesthesia. After careful manipulation with an endoscope, an elongated rough golden metallic-appearing object was brought into view. This foreign body was removed endoscopically without any trauma (Figure 1C). The baby was then admitted to the pediatric intensive care unit. The following day, the baby was largely asymptomatic and thus discharged with a scheduled follow-up appointment in 3 months.

## 3 | DISCUSSION

Up to 80% of all foreign bodies within the esophagus occur in children, with the highest incidence among those between 6 months and 3 years of age.[8,9] However, a 2-month-old baby swallowing a complete earring is quite unusual. The most common site of a foreign body retention is the cricopharynx. Moreover, among those foreign bodies that come to clinical attention, 80%-90% pass through gastrointestinal tract (GI) without causing any harm. Another 10%-20% require

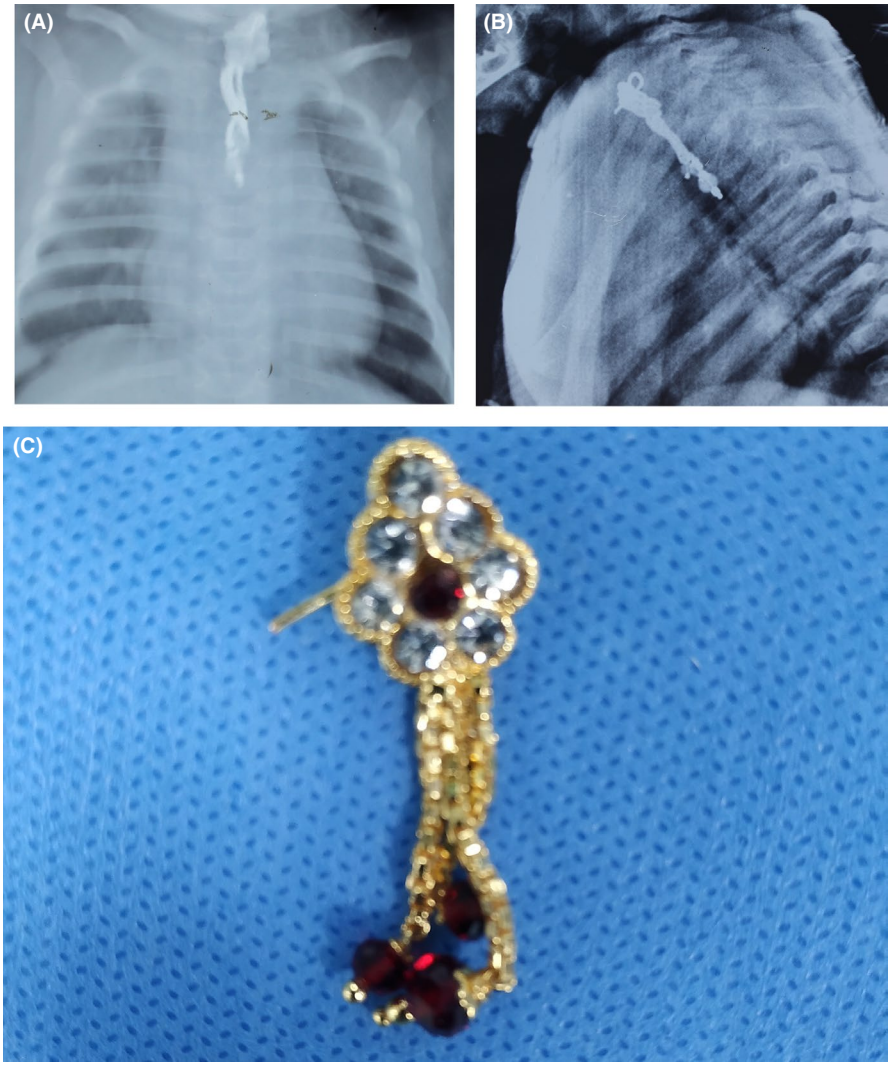


**FIGURE 1** A, X-ray soft tissue neck and chest anterior-posterior (AP) view. B, X-ray soft tissue neck and chest lateral view. C, Foreign body (earring)

a careful manipulation for endoscopic removal, with <1% of foreign objects requiring any surgical intervention.[10].

In this case, the foreign body was confined to the upper 1/3 of the esophagus. Notably, an ingested foreign body could damage the esophagus resulting in abscess formation, perforation, and strictures.[11] In addition to eroding into the trachea, an esophageal foreign body could also erode into the aorta resulting in sudden death. The final diagnosis is more straightforward when patients or family members can provide a history of foreign body ingestion. In this case, however, such history was not provided and instead quick examination via an AP view and lateral view X-ray of the neck was required to allow an immediate and precise clinical intervention. Potential complications included necrosis and perforation of the esophagus perforation caused by pressure, chemical, or electrical burns due to the earring, which had a sharp metallic hook at the upper end.[12] At follow-up 3 months later, the boy did not suffer any complications including strictures, stridor, or swallowing difficulties, and was doing well.

## 4 | CONCLUSION

In summary, a high index of suspicion for foreign body ingestion must be maintained when unattended children from lower socioeconomic contexts present with a sudden onset of obstructive respiratory and/or gastrointestinal symptoms. Prompt diagnosis can help avoid mismanagement and avoid potentially dire outcomes.

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### CONFLICT OF INTEREST

None.

### AUTHOR CONTRIBUTIONS

SAL: performed the described surgical procedure. AH: served as the anesthesiologist. FAS: compiled and wrote the case report. SAL and AH: subsequently reviewed the case report.

### ORCID

*Shafkat A. Lone* https://orcid.org/0000-0001-9248-6308
*Abdul Hameed* https://orcid.org/0000-0002-5319-1555
*Farooq A. Shiekh* https://orcid.org/0000-0003-0886-5941

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