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Case Report

An alarming case of metallic sharp foreign body ingestion in an infant

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ABSTRACT

Foreign body ingestion is a frequent challenge in the emergency room, with potential morbidity affecting around 1% of patients, often stemming from unintentional incidents. Accidents of this nature can result in severe complications leading to fatalities. Common complications involve lacerations, punctures, abscess formation, perforation, pneumomediastinum, mediastinitis, pneumothorax, pericarditis, tamponade, fistulas, and even vascular injuries to the aorta. The risk escalates significantly when the ingested object is sharp and narrow. Presenting an intriguing case, we report an instance of an infant ingesting a metallic, sharp foreign body. This particular case raises unique challenges given the vulnerability of the infant and the potential for severe complications associated with sharp objects. Immediate and precise medical intervention becomes paramount in such scenarios to prevent adverse outcomes. Vigilance in the emergency room is crucial, as the nature of foreign body ingestion can lead to diverse complications, emphasizing the need for a comprehensive understanding and swift response in managing these cases, particularly when involving infants who are at a heightened risk.

Keywords: Metallic foreign body, Infant, Oesophagoscopy

INTRODUCTION

Foreign body ingestion poses a significant challenge in ENT emergencies globally, particularly prevalent in childhood accidents. This occurrence is most frequent in the age group of 6 months to 6 years, where children are naturally curious and prone to accidents.[1] While toys play a crucial role in providing enjoyment and aiding in a child's learning and development, they also present a potential source of foreign bodies when ingested accidentally.[2]

Toys, inherently attractive to young children, can become objects of ingestion, adding to the complexity of ENT emergencies. A noteworthy trend in recent years involves the increased popularity of magnetic items like those found in refrigerators, magnetic jewellery, and magnetic toy building sets. This surge in availability has corresponded with a rise in magnetic foreign body ingestions, necessitating endoscopic or surgical interventions, as documented in current literature.[3]

The allure of magnets, coupled with their prevalence in various household items, underscores the need for heightened awareness and intervention strategies. Understanding these patterns of foreign body ingestion in children becomes crucial for timely and effective medical responses, ensuring the well-being of young individuals who may unknowingly encounter these potential hazards during play.[4]

CASE REPORT

With this background, we present a case of 9 months old infant presented to our ENT emergency with accidentally foreign body ingestion of metallic earring. Patient presented with complaints of drooling of blood-stained saliva. There was no history of fever, cyanosis, or noisy

breathing. Patient was stable on arrival and having saturation of 99% under room air. On examination, air entry was equal bilaterally. Patient was taken up for chest radiograph which shows a metallic earring in oesophagus (Figure 1). Routine blood investigations were done, and patient was taken up for rigid esophagoscopy and foreign body removal under general anaesthesia. Foreign body (metallic earring) was visualized at the level of cricopharynx whose hook was seen piercing the oesophagus and removed successfully with alligator forceps. Check oesophagoscopy was also done (Figure 2 A and B). Patient was extubated and shifted to ward for post operative monitoring and discharged after 24 hours.

Figure 1: Radiological investigation: shows a radiograph of the chest showing a radiopaque foreign body in the oesophagus.

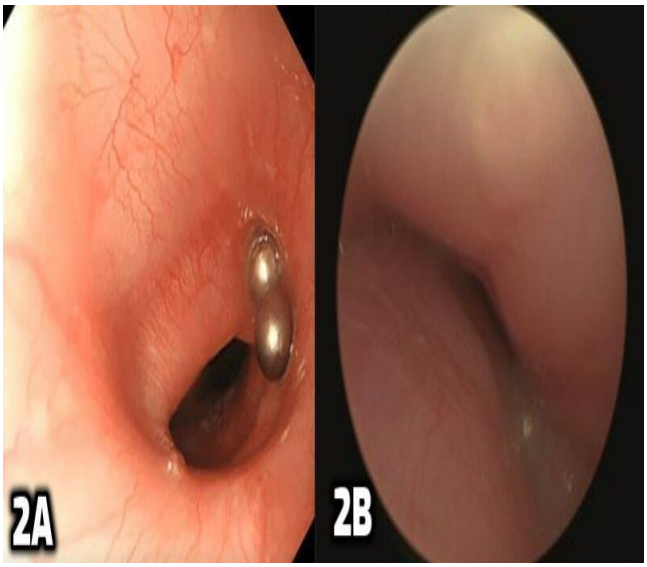

Figure 2 (A and B): Clinical photographs: showing the telescopic view of the oesophagus before and after the removal of metallic foreign body (earring).

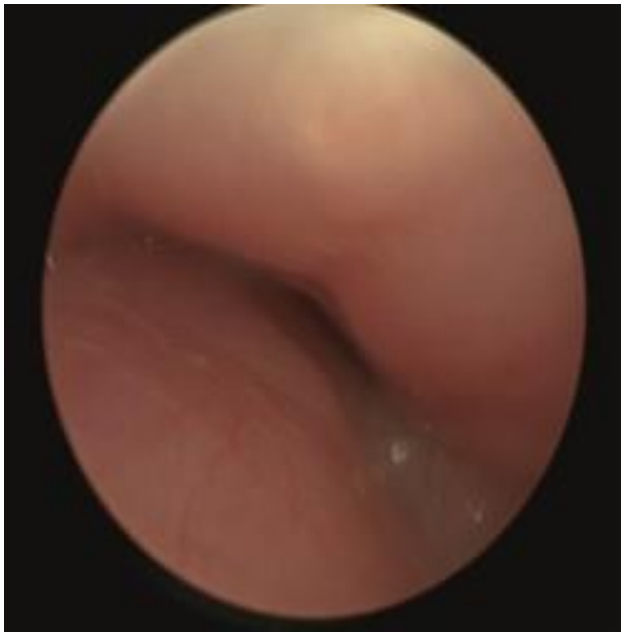

Figure 3: Telescopic view of the oesophagus.

DISCUSSION

Detecting and managing foreign body ingestion hinges on various factors, including the type (sharp, dull, pointed, blunt, toxic, or nontoxic), location in the body, and how long it has been lodged. Parents should be cautioned about the risks associated with toys containing metals or magnets, as distinguishing between metallic and magnetic foreign bodies can be challenging. It's advisable to restrict young and at-risk children's access to toys or objects with small magnets or metals.[5]

The ingestion of magnetic objects poses a considerable health threat to children, especially when multiple magnets are involved. Magnetic attraction through bowel walls can lead to serious gastrointestinal injuries, such as mural pressure necrosis, bowel perforation, fistula formation, or intestinal obstruction.[6] Raising public awareness about the dangers of these magnetic objects is crucial. Parents and caregivers should proactively remove high-powered small magnets from children's reach.

Physicians play a pivotal role in this scenario, needing to be vigilant when reviewing radiology for children presenting with respiratory or gastrointestinal symptoms. A high level of suspicion is essential for patients with unexplained gastrointestinal issues. In cases of magnetic foreign body ingestion, early and aggressive removal is vital to minimize potential morbidity and mortality, underscoring the importance of prompt medical intervention in such situations.[7,8]

CONCLUSION

Sharp and metallic foreign bodies impaction in the oesophagus is a clinical emergency. Sharp pointed

objects carrying a risk of injury and perforation should be removed immediately with an endoscope. Given that longer impaction time is associated with adverse events, early identification and endoscopic removal of foreign bodies are important to improve clinical outcomes.

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