Journal of Paediatric Surgeons of Bangladesh (2024) Vol. 15 (1 & 2)
Official Journal of the Association of Paediatric Surgeons of Bangladesh
https://doi.org/10.3329/jpsb.v15i1.89313

Journal of Paediatric Surgeons of Bangladesh

Case Report

Delayed Presentation of an Ingested Hijab Pin Impacted in the Second Part of the Duodenum: A Case Report

Rubaiyat Farhana[1], Nadia Ferdous[2], Mohammad Zonaid Chowdhury[3]
Mahfuzul Kabir[4], Tanvir Kabir Chowdhury[5]

Abstract

Foreign body ingestion is common in children; however, ingestion of sharp objects such as hijab pins poses a significant risk of gastrointestinal complications. We report a case of a 7-year-old female who presented with delayed referral after ingestion of a hijab pin. Serial radiographs demonstrated persistent localization of the foreign body, ultimately requiring surgical intervention. The foreign body was found impacted in the second part of the duodenum and was successfully removed by enterotomy. This case highlights the importance of early referral and timely intervention in sharp foreign body ingestion.

Keywords

Foreign body ingestion, Hijab pin, Duodenum, Pediatric surgery, Exploratory laparotomy

1. Rubaiyat Farhana
   Assistant Registrar
   Department of Pediatric Surgery
   Chittagong Medical College Hospital
2. Nadia Ferdous
   Resident, Department of Pediatric Surgery
   Chittagong Medical College Hospital
3. Mohammad Zonaid Chowdhury
   Assistant Professor
   Dept. of Pediatric Surgery
   Chittagong Medical College Hospital
4. Mahfuzul Kabir
   Professor and Head
   Dept. of Pediatric Surgery
   Chittagong Medical College Hospital
5. Tanvir Kabir Chowdhury
   Associate Professor, Pediatric Urology
   Department of Pediatric Surgery
   Chittagong Medical College Hospital

Correspondence to: Dr. Tanvir Kabir Chowdhury
Associate Professor, Pediatric Urology, Department of Pediatric Surgery, Chittagong Medical College Hospital
Email: ivan_tanvir@yahoo.com

Introduction

Foreign body ingestion is a frequent pediatric emergency, especially among children aged 6 months to 10 years.1 Sharp foreign bodies, including pins and needles, are associated with higher risks of impaction, perforation, and migration. Although coins are the most frequently ingested foreign bodies; hijab pin ingestion has been increasingly reported in Muslim communities due to cultural practices.2 Management depends on the type, location, duration, and symptoms. We present a case of delayed presentation of a hijab pin lodged in the duodenum requiring surgical removal.

Case Report

A 7-year-old female child, hailing from Teknaf, Cox's Bazar, was admitted to Chittagong Medical College Hospital (CMCH) on 25 January 2026 with a history of ingestion of a foreign body (hijab pin) 13 days prior to admission. Following ingestion, the patient's mother initially consulted a local hospital where conservative management was advised. An abdominal X-ray revealed a foreign body. The family opted for conservative treatment with laxatives. After 5–6 days, a repeat abdominal X-ray still demonstrated persistence of the foreign body. The patient was subsequently referred to Cox's Bazar Sadar Hospital, where she was admitted for 2–3 days and managed conservatively

again. Due to failure of progression, she was finally referred to CMCH. The patient had no history of abdominal pain, fever, vomiting, hematemesis, or per-rectal bleeding. General examination revealed normal findings. Abdomen was soft and non-tender. Serial plain X-rays of the abdomen were performed. A linear radiopaque foreign body was persistently visualized in the right paravertebral region at the L2–L3 level, with no distal migration over time (Figure 1). The clinical decision was that it was impacted in the small gut or outside the gut. So exploratory laparotomy was performed on 28 January 2026 due to failure of conservative management and risk of complications from the sharp foreign body. Intraoperatively, the foreign body was found impacted in the second part of the duodenum. An enterotomy was performed, and the hijab pin was successfully removed (Figure 2). The procedure was uneventful. The postoperative period was uneventful. The patient was managed with antibiotics, analgesics, and gradual oral feeding. She recovered well and was discharged in stable condition.



Figure 1: Hijab Pin stuck at paravertebral region

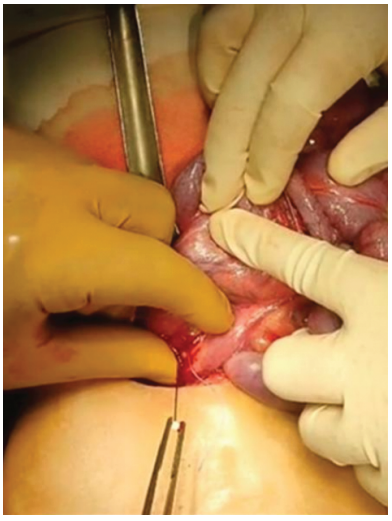


Figure 2: removal of Hijab Pin from duodenum

Discussion

Sharp foreign bodies such as hijab pins carry a higher risk of impaction and perforation compared to blunt objects. Although many ingested foreign bodies pass spontaneously, lack of progression on serial radiographs is a strong indication for intervention.3 Duodenal impaction is uncommon due to its fixed retroperitoneal position but poses a significant risk.4,5 From this case it was retrospectively realized that an endoscopic removal could have been possible if the suspicion of impaction in the duodenum was made.6 Delays in referral and prolonged conservative management increased the risk in this case. Early endoscopic or surgical removal is recommended when sharp foreign bodies fail to progress within 3–5 days or remain stationary.

Conclusion

This case emphasizes the importance of early referral to tertiary care, close radiological follow-up and prompt surgical intervention when conservative management fails. Sharp foreign body ingestion in children should be treated with a high index of suspicion to prevent life-threatening complications. Endoscopic examination can also be considered even after delayed presentation.

Conflict of interest

None

References

1. Emeka CK, Chukwuebuka NO, Tochukwu EJ. Foreign body in the gastrointestinal tract in children: A tertiary hospital experience. African Journal of Paediatric Surgery. 2023 Jul 1;20(3):224-8.

2. Alam R, Mazumder MW, Begum F, Nahid KL, Musabbir N, Akram L, Akter S, Rukunuzzaman M. Foreign Body Ingestion in Children: Experience in Bangladesh. Malaysian Journal of Paediatrics and Child Health. 2025 Dec 23;31(3):50-6.

3. Ang CX, Mun WK, Aw MM, Lin D, Chong SL, Ong LY, Nah SA. Gastrointestinal transit time of radiopaque ingested foreign bodies in children: experience of two paediatric tertiary centres. Singapore Medical Journal. 2025 Jan 1;66(1):24-7.

4. Ergun E, Ates U, Gollu G, Bahadir K, Yagmurlu A, Cakmak M, Aktug T, Dindar H, Bingol-Kologlu M. An algorithm for retrieval tools in foreign body ingestion and food impaction in children. Diseases of the Esophagus. 2021 Jan;34(1):doaa051.

5. Gani M. Accidental ingestion of scarf/hijab pins in Muslim females of Kashmir Valley. Asian Journal of Medical Sciences. 2024 Oct 1;15(10):181-5.

6. Tetarbe S, Jain S, Shah I. Accidental ingestion of hijab pin in an infant and successful removal by upper gastrointestinal endoscopy: A case report. Wadia Journal of Women and Child Health. 2025 Aug 18;4(1):44-6.