**SCARF PIN INGESTION: CASE REPORT AND LITERATURE REVIEW**

**ABSTRACT**

Foreign body ingestion, whether accidental or intentional, is a common occurrence and the second most frequent indication for emergency endoscopy. Symptoms can vary significantly depending on the patient, the type, and the location of the foreign body, ranging from no clinical signs to severe and potentially life-threatening manifestations. However, another type of accidental ingestion is gaining attention, particularly scarf pins, reported among young Muslim girls. We present the cases of four veiled young women who accidentally swallowed a pin held between their lips while adjusting their veils, all of whom underwent successful endoscopic extraction. Although this accident can be avoided, public awareness of potential complications is necessary to prevent such incidents.

*Keywords:* scarf pin ingestion**,** endoscopy, hijabi women

1. **INTRODUCTION**

Foreign body ingestion primarily results from the accidental swallowing of objects. While the exact frequency of this phenomenon is unknown, most cases occur in children, with the highest incidence between 6 months and 6 years [1]. In healthy adults, this type of incident is more common in individuals with psychiatric disorders, developmental delays, or those under the influence of alcohol. However, another type of accidental ingestion is becoming more significant, notably scarf pins, reported among young Muslim girls who hold them between their lips or teeth while adjusting their headscarves. The hijab pin is a pointed metal object about 3 cm long with a small plastic ball at one end (Fig. 1). Due to the sharp tip and length of the pin, this ingestion poses a particularly high risk of perforation, aspiration, or bleeding.  
We report the cases of four young women who accidentally swallowed a hijab pin and review the literature on this topic.



Figure 1 : A hijab pin ∼3 cm in length with a plastic ball head.

1. **CASES PRESENTATION**

Four patients were admitted to the emergency department after accidentally swallowing a scarf pin. These pins are used to secure the hijab, a religious veil worn by Muslim women that covers the hair and neck. The patients, young Muslim women aged 18 to 20, explained that they usually held the pin between their teeth while adjusting their hijab. One of them mentioned holding the pin between her lips when she accidentally coughed while arranging her veil. Each patient had swallowed a single pin. The average consultation delay was three days, ranging from two to seven days. They had no significant medical history and were all asymptomatic, except for one who reported cervical discomfort when swallowing. Upon arrival, vital signs were normal, and clinical examination revealed no abnormalities.  
Plain abdominal radiographs taken at admission showed a needle-shaped metallic shadow in the area corresponding to the gastric region in all patients (Fig. 2).

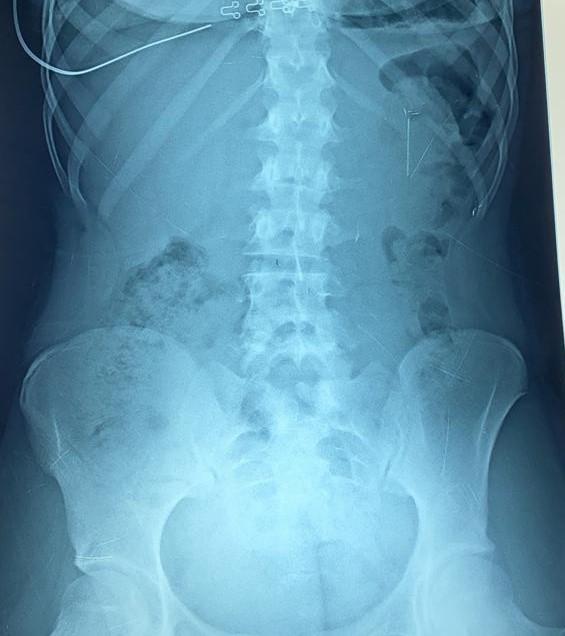


Figure 2 : An unprepared abdominal film showing a needle in an intragastric position.

One patient also underwent an abdominal CT scan, revealing a 23 mm linear foreign body in the antrum-pyloric region without detectable complications (Fig. 3).

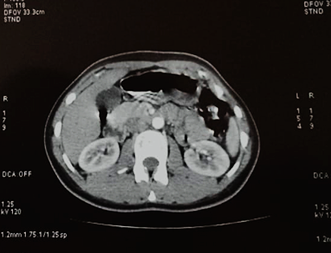
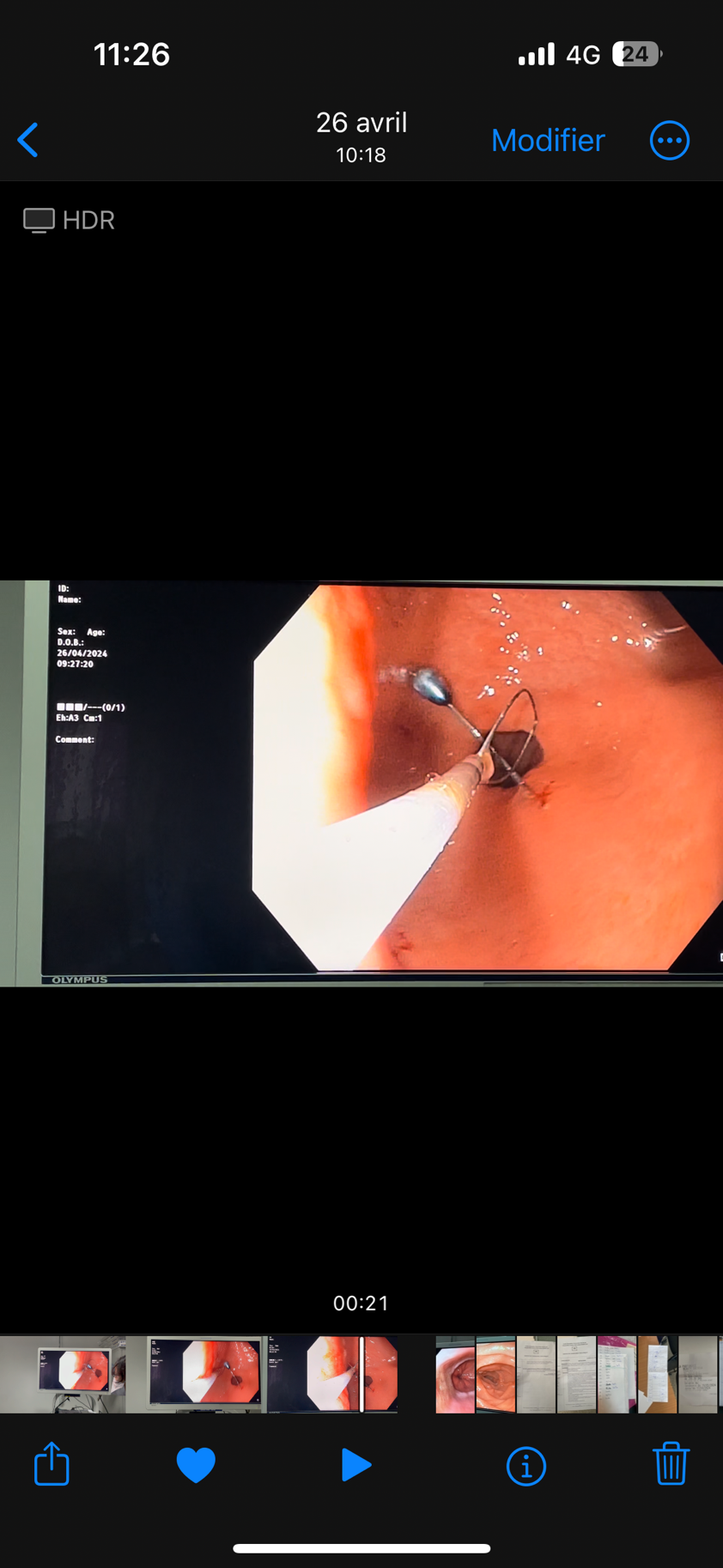


Figure 3 : A CT scan showing the presence of a linear foreign body in the antropyloric region.

Emergency esophagogastroduodenoscopy was performed under sedation for all patients. The scarf pins were located in the antral region in three patients, with one pin embedded (Fig. 4), and in the duodenal region in the fourth patient. No severe mucosal lesions were observed in the esophagus or stomach. Endoscopic extraction was performed using a polypectomy snare in one case (Fig. 5), a crocodile snare in another, and a rat-tooth snare in two cases. A follow-up endoscopy confirmed the absence of mucosal lacerations in the esophagus or stomach, allowing all patients to be discharged the same day.



Figure 4: Pin embedded in the antrum.



*Figure 5: Successful extraction of the needle using the polypectomy loop.*

1. **DISCUSSION**

Accidental scarf pin ingestion, though rare, is relatively common among young Muslim women, with most reported cases occurring in the 11 to 20 age group [2,3,4]. This situation often arises from the habit of holding pins between their teeth or lips while adjusting their hijab. It requires particular attention due to the risk of severe complications. These pins, classified as sharp foreign bodies, are particularly concerning due to the increased risk of intestinal perforation (15 to 35% of cases). Their impaction in the intestinal tract can cause local inflammation, leading to bleeding, obstructions, or erosions [2,5]. Rare complications, such as foreign body migration into the mediastinum and thorax, have also been reported [5]. The risk of complications is higher in patients with adhesions from previous abdominal surgery or pre-existing intestinal diseases, such as Crohn's disease [2].  
The removal of these foreign bodies is prioritized when they are located in the esophagus or stomach [6]. It is recommended to extract them as soon as possible to limit complications. If extraction fails, daily clinical monitoring and follow-up radiographs are necessary. Surgical intervention is considered if the object has not progressed within three days of ingestion [7]. Although some cases report spontaneous passage of sharp foreign bodies in adults [8], many severe complications have been observed, such as perforated appendicitis, transluminal migration into the peritoneum, liver abscesses, or colon and small intestine perforations [9,10]. An Indian study on 75 young Muslim girls who accidentally ingested a scarf pin showed a successful recovery by esophagogastroduodenoscopy in 48% of patients, while the others were treated conservatively. However, 2.6% of patients developed peritonitis requiring laparotomy, and one patient died [2].  
The study by Yogev et al. also demonstrated associated risks, with 208 patients having swallowed a hijab pin. Although the risk of catastrophic sequelae is low, it becomes significant if the pin remains impacted for several months [11]. Patients who recently ingested a pin or did so in the past few months should undergo a CT scan to rule out any infectious or mechanical risks [12].  
The American Society for Gastrointestinal Endoscopy (ASGE) recommends urgent endoscopic extraction of foreign bodies still present in the esophagus [13]. Once in the stomach, there is a limited window for endoscopic extraction, as most objects are expelled within 4 to 6 days [3]. Similarly, the European Society of Gastrointestinal Endoscopy (ESGE) recommends urgent endoscopic extraction of sharp foreign bodies located in the esophagus, ideally within 2 to 6 hours. For those located in the stomach, intervention should be performed within 24 hours of ingestion [7]. If endoscopic extraction is impossible, rigorous clinical observation with radiographic follow-up is necessary. In case of bleeding or perforation, immediate surgical exploration is required. An endoscopic examination is also recommended after foreign body removal to assess for any residual complications [7].

1. **CONCLUSION**

Foreign body ingestion in adults is rare, but cases of hijab pin ingestion are increasing, posing a potential cultural risk among women who wear the veil. Early endoscopic extraction can prevent complications such as hemorrhages or perforations. Although preventable, this issue requires health education to inform the public about the complications related to this accident.

**CONSENT**

As per international standards or university standards, patient(s) written consent has been collected and preserved by the author(s).

**ETHICAL APPROVAL**

It is not applicable.

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