CASE REPORT

Ingested pins - A potential hazard for hijabis: A case report

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SUMMARY

Accidental swallowing of objects commonly occurs among children and most of the objects pass through the gastrointestinal tract and out with the stool without any complications. However, recent reports have shown that there is an increasing occurrence of accidental ingestion of hijab pins among young hijab-wearing Muslim women or "hijabi". We highlight one such case, in which a young lady accidentally swallowed a pin that she was holding between her lips while she was styling her hijab. The pin was not successfully retrieved via endoscopy but was fortunately excreted spontaneously without any serious complications.

INTRODUCTION

Foreign body ingestion is most commonly due to accidental swallowing of objects. Although the incidence of this act is unknown, majority of cases occur among the paediatric age groups, with a peak between the ages of 6 months and 6 years.[1] In the healthy adult population, foreign body ingestion occurs more commonly among those with psychiatric disorders, developmental delay and alcohol intoxication.[2] Recently, there has been a rise in the number of cases of ingested pins among Muslim women, especially among the hijabis who often hold the pins between their lips in order to free their hands to style the headscarf.[1,3-5]

Most foreign body objects that are commonly swallowed by adults can pass through the gastrointestinal tract uneventfully. However, complications like bowel perforation and obstruction may occur, particularly in cases involving sharp metal objects and animal bones. We report here a case of a young lady who accidentally swallowed a hijab pin and we review the literature on other accidental pin ingestion among Muslim women.

CASE REPORT

Miss NA, an 18-year-old student, presented to the Emergency Department, immediately after allegedly swallowing a hijab pin while putting on her headscarf. She had placed two pins between her lips, but accidentally swallowed one. Initially, she experienced some discomfort along her throat and neck, but there was no dysphagia or vomiting. She also did not experience any cough, dyspnoea or haemoptysis. A plain abdominal radiograph revealed a pin located at the right hypochondrium (Figure 1a). An emergency oesophagogastroduodenoscopy was performed up to the second part of duodenum (D2), but failed to locate the pin. No mucosal laceration or bleed was seen in the oesophagus or stomach.

She subsequently underwent a series of abdominal radiographs. A radiograph on day-4 revealed that the pin had migrated to the left side of the abdomen (Figure 1b), and remained in the same position for five days. She did not experience any abdominal pain during this period. A computed tomography (CT) was performed on the fifth day, which showed the pin traversing the posterior wall of the D3/D4 junction, with its tip in the retroperitoneal region, adjacent to the left kidney (Figures 2a and 2b). No pneumoperitoneum or ascites was seen.

She was managed conservatively. A radiograph that was taken two weeks later showed migration of the pin to the left lower abdomen (Figure 1c). Finally, the pin was no longer visualized in the abdominal radiograph after two months.

DISCUSSION

Foreign body ingestion requires close monitoring due to the possibility of serious complications. Although the ingested pin passed through the gastrointestinal tract uneventfully in our case, impaction of a sharp object in the tract has been known to cause local inflammation leading to bleeding and obstruction, or causing erosion and perforation.[1,5] Rare complication such as migration of the foreign body to the mediastinum and thorax has also been reported.[5] The risk of complications is increased in patients with adhesions due to prior abdominal surgery, and pre-existing intestinal diseases like Crohn's disease.[1]

Hijab pin ingestion is more common among young Muslim hijabis, with majority of reported cases occurring in the 11-20 years age group.[1,3,4] Young hijabis are more likely to experiment with different hijab styles to keep up with the latest trends. Some styles require the use of both hands to wrap the scarf around the head and multiple pins to keep it in places. They may be more careless in holding the hijab pins between their lips or teeth, and these pins may be accidentally ingested while talking, coughing or taking deep breaths.

American Society for Gastrointestinal Endoscopy (ASGE) recommends emergency endoscopic retrieval of foreign bodies that are still within the oesophagus.[2] Once the foreign body has passed through the oesophagus, the window of opportunity for endoscopic retrieval exists only as long as the foreign body remains in the stomach. If the foreign body has entered the stomach, most of them will be excreted from the GI tract within 4-6 days.[4]

Similarly, the European Society of Gastrointestinal Endoscopy recommends emergency (within 2 to 6 hours) endoscopic

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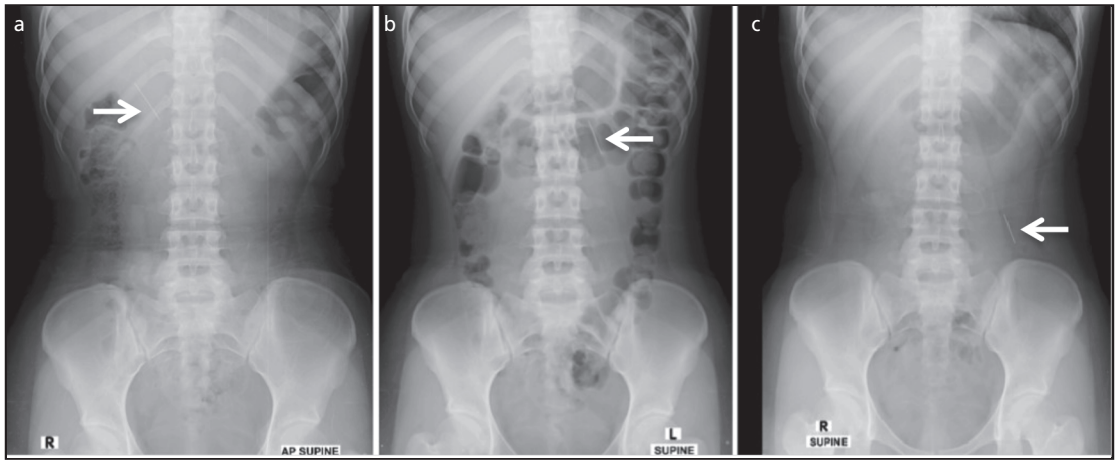

Fig. 1: Serial abdominal radiographs revealed the locations of the pin (arrows) at day 1 (1a), day 4 (1b), and day 14 (1c).

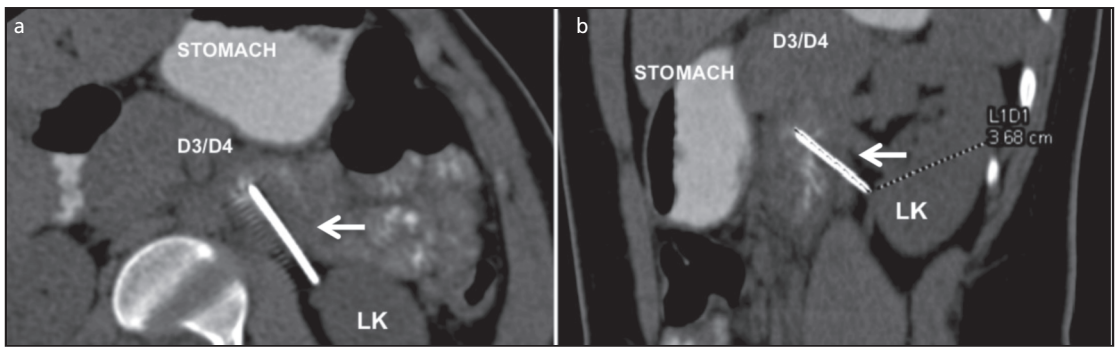

Fig. 2: CT images in the axial (2a) and sagittal (2b) views reveal the precise location of the pin that was traversing the posterior wall of the D3/4 junction (arrows), with its tip in the retroperitoneal region, adjacent to the left kidney (LK).

retrieval of sharp-pointed foreign body in the oesophagus, and urgent (within 24 hours) endoscopic retrieval of sharp-pointed foreign body in the stomach.[6] If the foreign body cannot be retrieved endoscopically, inpatient treatment and close clinical observation is mandatory with radiographic follow-up. Should any bleeding or perforation occur, immediate abdominal exploration is required.

Radiographs are typically the first-line imaging modality in suspected foreign body ingestion. A radiographic evaluation of the neck, chest and abdomen is recommended to assess the presence, location, size, and number of ingested objects and to detect complications like aspiration, pneumomediastinum, pneumoperitoneum, or subcutaneous emphysema.[6] Most metallic objects are radio-opaque, as was seen in our patient. Computed tomography (CT) can be considered in cases of suspected complications such as abscess or obstruction, or if the ingested foreign body is causing symptoms. In our case, serial radiographs showed that the position of the pin remained similar for five consecutive days, raising concern of impaction and warranting the need for the CT.

CONCLUSION

Foreign body ingestion in adults is rare, but alarmingly, reported cases of hijab pin ingestion among young hijabis are on the rise. Early endoscopic retrieval helps prevent complications like bleeding or perforation. However, prevention is indeed better than cure. Health education and awareness regarding this issue should be provided to the Muslim community to help reduce the incidence. Instead of holding the pins between their lips or teeth while they style their headscarves, they could instead secure hijab pins at the edge of their sleeves or on a pin cushion.

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