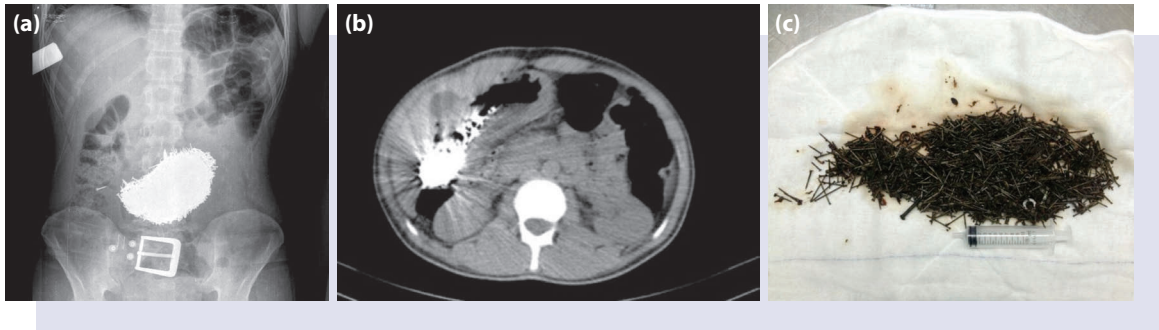


# Foreign Bodies Ingested by a Mentally Retarded Patient

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A mentally retarded patient was brought to the emergency department by his mother due to abdominal pain and the occasional vomiting of blood during the previous weekend. The patient claimed that he had swallowed nails approximately 1 month prior. However, the patient's history of reliability was low. His vital signs were stable, and there was no melena upon rectal examination. There was no tenderness, defense or rebound in the abdominal examination. Chest X-ray was normal, while there were intensive radiopaque images in the abdominal X-ray (Figure 1a). An abdominal CT scan was performed to assess the position of the foreign bodies and to determine any other intra-abdominal complications (Figure 1b). The patient was admitted to a general surgery ward, and foreign bodies were removed from the small intestine (Figure 1c). The patient was discharged without complications after 3 days. [see page 85 for future explanation]



**Figure 1.** (a) X-ray showed radiopaque bodies. (b) Abdominal CT showed radiopaque bodies. (c) The nails and screws were removed from the small intestine of the patient.

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## **DIAGNOSIS: Gastrointestinal Tract Foreign Bodies**

The detection of gastrointestinal tract (GI) foreign bodies has been possible for about 70 years.<sup>[1]</sup> The majority of the foreign bodies in the body occur by ingestion.<sup>[2]</sup> Ninety percent of them are excreted from the GI spontaneously, 10% - 20% of them need endoscopic management, and about 1% of them require surgery.<sup>[2-4]</sup> Eighty percent of ingested foreign bodies are ingested by the pediatric population.<sup>[3]</sup> In adults, foreign body ingestion can also occur, especially in people with intellectual disabilities, alcoholics, and in those without teeth, but it also can result from accidental swallowing.<sup>[2,4]</sup> Neck, chest and abdominal radiography (X-ray) reveal metal objects and bone, as well as the presence of any perforation.<sup>[2]</sup> Foreign bodies larger than 2 cm in diameter cannot pass the pyloric canal and the ileocecal valve, and those larger than 5 cm cannot pass the duodenal lobe.<sup>[2,5]</sup> Radiopaque bodies are often easily detected, while non-radiopaque bodies are not. All foreign bodies can be detected by X-ray, and it may also reveal their characteristics, such as location, size and contour. Computed tomography (CT) is often used for screening and for detecting complications of foreign bodies. However, artifacts may be seen when using CT to image metallic foreign bodies.<sup>[5]</sup> If cases with obstruction have bleeding and perforation, and if the foreign body cannot pass the iliocecal region for two weeks, or if it does not move for more than 72 hours, surgery should be performed.<sup>[4]</sup>

In our case, although the patient has mental retardation and therefore has low reliability, he stated that he had swallowed nails. In cases with a history of low reliability, more detailed physical examinations and imaging techniques should be performed. Radiopaque foreign bodies were seen at the level of the small intestine in the X-ray (Figure 1). Although there are artifacts in the abdominal CT scan, no complications were observed (Figure 1b, c). In our case, the foreign bodies, which were ingested about 1 month prior, were still present, and the patient was hospitalized and underwent surgery after surgical consultation.

### **Conclusion**

Foreign body ingestion can be seen in adults, especially in those with intellectual disabilities. In spite of their low reliability, any medical history taken from the patients should be taken into account. More detailed physical examinations should be performed, and the threshold for the use of imaging techniques in these patients should be low.

### **References**

1. BEST RR. Management of sharp pointed foreign bodies in the gastrointestinal tract. *Am J Surg* 1946;72:545-9.
2. Telford JJ. Management of ingested foreign bodies. *Can J Gastroenterol* 2005;19:599-601.
3. Zhang S, Cui Y, Gong X, Gu F, Chen M, Zhong B. Endoscopic management of foreign bodies in the upper gastrointestinal tract in South China: a retrospective study of 561 cases. *Dig Dis Sci* 2010;55:1305-12. [CrossRef](#)
4. Ribas Y, Ruiz-Luna D, Garrido M, Bargalló J, Campillo F. Ingested foreign bodies: do we need a specific approach when treating inmates? *Am Surg* 2014;80:131-7.
5. Lee JH, Kim HC, Yang DM, Kim SW, Jin W, Park SJ, et al. What is the role of plain radiography in patients with foreign bodies in the gastrointestinal tract? *Clin Imaging* 2012;36:447-54. [CrossRef](#)