

CLINICAL IMAGE

Accidental ingestion of a long dental crown

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Abstract

It is recommended that a sharp-pointed object, such as a dental crown, in the proximal duodenum be retrieved endoscopically if this can be accomplished safely.

KEYWORDS

accidental ingestion, dental crown, endoscopic procedure, proximal duodenum, sharp-pointed object

1 | CLINICAL QUESTION

What would be your plan if your patient accidentally ingested a long dental crown and its location was in the proximal duodenum?

2 | CASE PRESENTATION

An 83-year-old female patient who was admitted to our hospital with a diagnosis of progressive supranuclear palsy accidentally ingested a long dental crown. Because of the disease, she was bedridden and using a gastrostomy tube. A dental hygienist noticed that her dental crown was missing. It was 3.7-cm long covering four consecutive teeth and was found by an immediate X-ray (Figure 1). A computed tomography scan located the crown in the descending duodenum (Figure 2). Therefore, an urgent gastrointestinal endoscopy was performed to remove the crown, but it was not found in the proximal duodenum during the procedure. We began watchful follow-up, on day 5 of which the crown was in the left lower quadrant of the abdomen (Figure 3) and on day 8 of which it disappeared from the X-ray without complications. A clinical guideline recommends



FIGURE 1 Abdominal X-ray showing the dental crown at right upper quadrant of the abdomen

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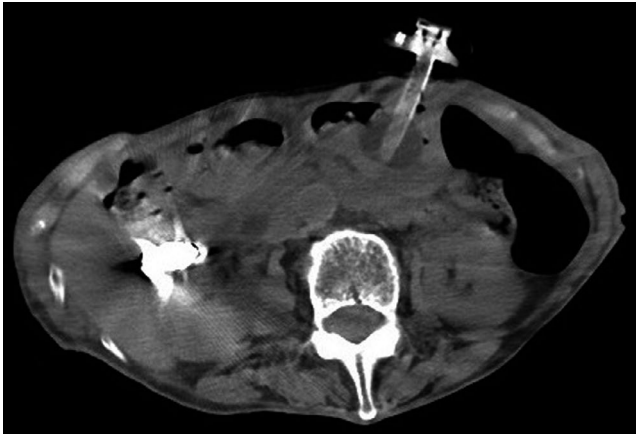


FIGURE 2 Computed tomography revealing the dental crown in the descending part of the duodenum

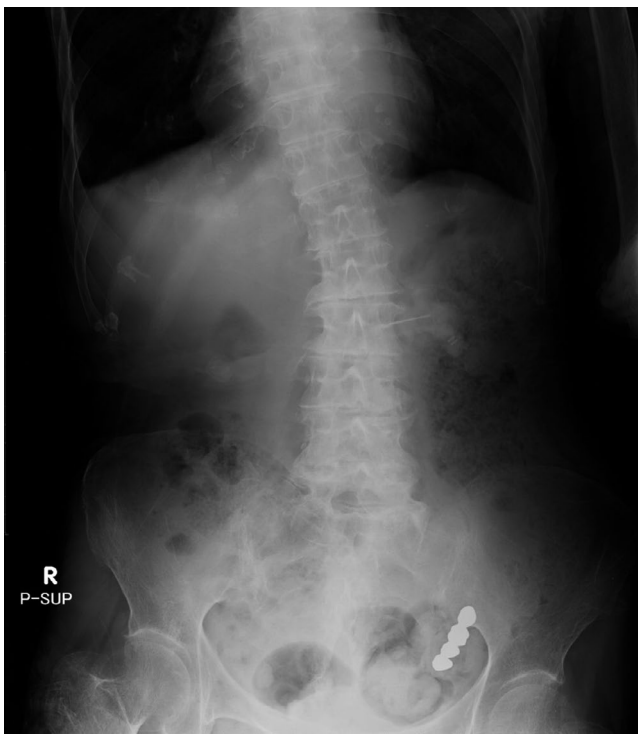


FIGURE 3 Abdominal X-ray showing the dental crown at left lower quadrant of the abdomen on day 5

retrieving a sharp-pointed object in the proximal duodenum endoscopically whether this can be accomplished safely.¹ It also mentions that inpatient treatment and close clinical observation are mandatory in cases of such objects that cannot be retrieved endoscopically.¹

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHOR CONTRIBUTIONS

KT: wrote the first draft of the manuscript. KT, CM, and HB: contributed to the clinical management of the patient. HH: performed the gastrointestinal endoscopy. KT, CM, HB, and HH: reviewed the final draft of the manuscript.

DATA AVAILABILITY STATEMENT

Not applicable.

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REFERENCES

1. Birk M, Bauerfeind P, Deprez PH, et al. Removal of foreign bodies in the upper gastrointestinal tract in adults: European society of gastrointestinal endoscopy (ESGE) clinical guideline. *Endoscopy*. 2016;48(5):489-496.

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