Endoscopic removal of dental prosthesis impacted in the duodenal papilla

A 69-year-old man with a history of Alzheimer’s disease was admitted to the emergency department 27 hours after ingesting his dental prosthesis. The patient’s main complaints were dysphagia, epigastric pain, bilious vomiting, and severe nausea. Palpation revealed no pathological findings, the leucocyte count was normal, and there was only a slight elevation in C-reactive protein. The physical examination did not reveal pneumoperitoneum. Abdominal radiograph showed an irregular densification in the right middle abdomen (Fig. 1). Abdominal computed tomography scan confirmed the presence of the prosthesis in the descending segment of the duodenum (Fig. 2). A video-assisted endoscopy was performed to remove the foreign body (Fig. 3, Video 1).

First, the dental prosthesis was removed from the duodenal papilla. Then, a condom was used to contain the prosthesis, which was extracted successfully and without causing any esophageal injury (Fig. 4, Fig. 5). The procedure was performed smoothly and there were no complications after endoscopic treatment. Dental prostheses and small orthodontic appliances account for the majority (73%) of accidental sharp ingestion in normal adults [1]. As surgery in the duodenum is difficult and carries high mortality and morbidity risks, endoscopic removal of the foreign body is recommended as the initial choice of treatment because it is less invasive [2]. Endoscopy should be the first choice for patients in whom a foreign object is demonstrated to be fixed in the duodenal papilla. Furthermore, use of a condom through the endoscope remains the safest therapeutic approach when the foreign body carries a high risk of perforation.

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Dental prosthesis was found to be fixed in the duodenal papilla and it was removed successfully by endoscopy.

Video 1

Competing interests
None

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Video 1
Dental prosthesis was found to be fixed in the duodenal papilla and it was removed successfully by endoscopy.

E11