

Accidental ingestion of a toothbrush

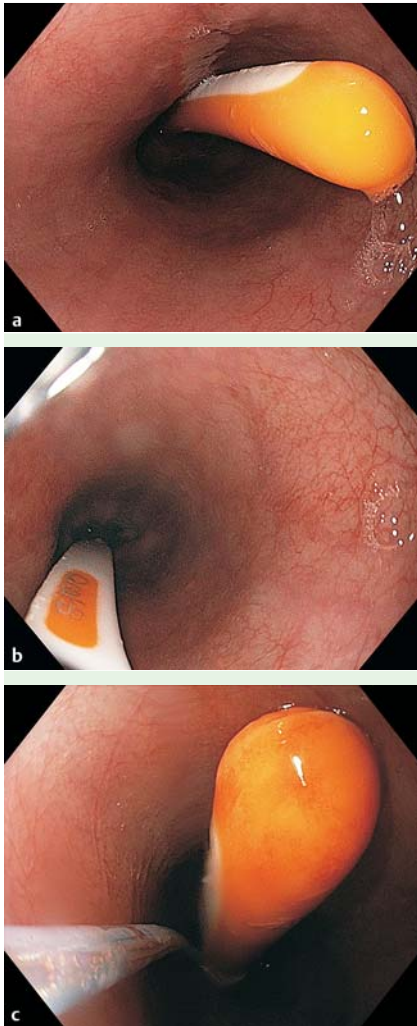


Fig. 1 Endoscopic views in an adult Nigerian man who had accidentally swallowed his toothbrush showing: **a** the distal end of the toothbrush, which was located within the esophagus after becoming impacted at the gastroesophageal junction; **b** the toothbrush in the esophagus (anterior view); **c** the toothbrush being held with the grasping forceps prior to its removal.

Foreign bodies of the gastrointestinal tract are common; they can be ingested or inserted accidentally or intentionally [1], with 80% of cases occurring in children between the ages of 6 months and 3 years [2]. In adults, ingestion of foreign bodies often occurs accidentally [1]; however, psychiatric patients, people who are incarcerated, malingers, and those with an altered sensorium may sometimes ingest foreign bodies intentionally [3]. Here we report the case of an adult Nigerian man who accidentally ingested his toothbrush.



Fig. 2 The toothbrush after its removal from the esophagus.

A 28 year-old man presented after inadvertently swallowing an adult-sized toothbrush while brushing his mouth. He had no other previous medical history and no background of psychiatric illness. General and systemic examinations were unremarkable and his vital signs were normal. Chest and abdominal radiographs done before referral to our department were said to have located the foreign body in the stomach. Upper gastrointestinal endoscopy performed with an Olympus gastroscope (GIF-HQ190), however, showed the toothbrush to be in the esophagus (Fig. 1 a, b) and grasping forceps (FG-301Q) were used to remove it (Fig. 1 c and Fig. 2).

The majority of ingested foreign bodies are able to pass through the gastrointestinal tract without causing significant harm [4]. However, a patient may become symptomatic or develop complications when a foreign body fails to pass spontaneously. Our patient was asymptomatic and tolerating oral intake on presentation. The toothbrush in this case became impacted at the gastroesophageal junction (GEJ), which is one of the four areas of physiologic narrowing in the esophagus. This finding is similar to other cases previously reported [5–8]. The poor localization of the toothbrush on radiographs may be explained by the non-radiopaque nature of the object. However, in some series false-negative and false-positive rates for radiography of up to 47% and 20% respectively have been reported [9]. Although up to 90% of foreign bodies in the gastrointestinal tract will be passed spontaneously, objects located in the esophagus should be removed as soon as possible [10].

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Competing interests: None

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