

Accidental Ingestion of a Foreign Body in Adults: Case Report and Literature Review

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Abstract

The ingestion of foreign bodies is a frequent reason of consultation in children, in adults the most exposed person are prisoners, psychotic patients, as well as toothless elderly patient, it can be accidental or voluntary in 80 to 90% spontaneously cross the digestive tract without any problem, only 10 to 20% of foreign bodies lead to a complication, often asymptomatic apart from a complication, the positive diagnosis is based on medical history, standard radiography and sometimes CT scan, endoscopic extraction is performed in 1 case out of 5, and surgery is indicated in case of failure of the endoscopy or in case of complication. We report the case of a patient admitted for a high occlusion syndrome following an ingestion of a foreign body (denture), given the failure of the endoscopic therapeutic project we performed a surgical extraction of the foreign body by a gastrotomy.

Introduction

The ingestion of foreign bodies is a frequent reason for admission to the emergency room, often in children, but it can occur in adults, particularly in the case of prisoners and psychotic patients, as well as toothless elderly person who are most at risk of ingestion of foreign bodies [1] between 80 to 90% of ingested foreign bodies spontaneously cross the digestive tract without any problem, only 10 to 20% cause a complication including a high occlusion [2] most common foreign bodies ingested are fish bones (9-45%), Bones (8-40%) and Dentures (4-18%) [3]. We report the case of a patient admitted for a

high occlusion syndrome following ingestion of a foreign body (denture), due to the failure of the endoscopic therapeutic project we performed surgical extraction of the foreign body by gastrotomy.

Patient and Observation

A 60-year-old patient with Parkinson's syndrome undergoing treatment with L-dopa was admitted to the emergency room for accidental ingestion of a foreign body (denture) causing a high obstruction syndrome, Vomiting and abdominal pain without externalized digestive bleeding and in whom the clinical exam-



Figure 1: (a) Intraoperative image showing a denture (b) Removed after a gastrotomy

ination finds a conscious patient who is hemodynamically and respiratory stable with epigastric tenderness on clinical examination, we first tried an endoscopic extraction of the denture, after its failure on several occasions we performed a surgical extraction by performing a gastrotomy figure 1 the postoperative follow-up was simple the patient was having been seen without any complication.

Discussion

The ingestion of foreign bodies is a frequent emergency that can lead to morbidity and even significant mortality if not treated quickly and adequately [4], a situation that is common in children (80%), but adults, especially prisoners, psychotic patients, as well as elderly people who are edentulous, are most at risk and have more frequent impactions of food foreign bodies (bones, fish bones, etc.) and more rarely accidentally ingest dentures [2] only 10 to 20% of foreign body ingestions require endoscopic extraction and less than 1% require surgery [2,4]. In 13% of cases, the patient consults immediately after a complication, revealing the ingestion of the foreign body [5]. The positive diagnosis is made by careful questioning with the patient and his family, the clinical signs vary according to the type of foreign body ingested (Table 1) [6].

Table 1: Classification of swallowed foreign bodies [6].

Type	Examples
Blunt objects	Round objects: coin, button, toy Batteries, magnets
Sharp-pointed objects	Fine objects: needle, toothpick, bone, safety-pin, glass pieces Sharp irregular objects: partial denture, razor blade
Long objects	Soft objects: string, cord Hard objects: toothbrush, cutlery, screwdriver, pen, pencil
Food bolus	With or without bones
Others	Packets of illegal drugs

As long as no occlusion or other complications develop, patients are asymptomatic. Most patients experience foreign body sensation, difficulty swallowing, chest or abdominal pain, or vomiting [7]. esophageal foreign bodies often manifest as dysphagia, odynophagia, or retrosternal pain, sore throat, sometimes respiratory signs such as choking, stridor or shortness of breath [8] Physical examination should look for signs of obstruction and complications including lung infections which reveal 5% of foreign body ingestions a retropharyngeal abscess, mediastinitis or cellulitis which mainly involve bones, dentures or bone splinters. Bleeding and perforation are mainly seen when sharp and sharp objects are ingested [2]. The paraclinical examination is essentially based on the standard radiograph of the face and profile of the affected region, which makes it possible to specify the location of the radio-opaque foreign body and to detect a possible complication, such as pneumoperitoneum or pneumo-mediastinum. CT scan is indicated for the detection of radio dense foreign bodies and also makes it possible to visualize a possible associated complication (inflammation, ab-

cess, perforation) [9]. the foreign body is generally removed by esophagogastroduodenoscopy in 1 case out of 5 [8], a surgical intervention is necessary in less than 1% of cases, in case of organ perforation or failure of endoscopic extraction of the foreign body, mortality is low, less than 1% [10].

Conclusion

Ingestion of foreign bodies is a common situation, especially in pediatric practice. The evolution is most often favorable and without endoscopic intervention. The primary role of the practitioner is to evaluate the patient clinically and radiologically, in order to recognize situations that require emergency endoscopy. Clinical and radiological surveillance must be maintained if the foreign body has not been removed.

Authors' contributions

This work was carried out in collaboration among all authors. All authors contributed to the conduct of this work. They also declare that they have read and approved the final version of the manuscript.

Consent

According to the international or academic standard, patient consent was collected and retained by the authors.

Ethical Approval

As per international standard written ethical approval has been collected and preserved by the author(s).

Competing Interests

Authors have declared that no competing interests exist.

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