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A PHENOMENAL JOURNEY OF A BENT NEEDLE THROUGH GUT. A CASE REPORT

Dental Science

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ABSTRACT

Inadvertent swallowing of sharp foreign bodies can lead to severe complications in the gastrointestinal tract. The purpose of this article is to add to the literature of case reports an incidence of accidental swallowing of a bent irrigating needle during root canal treatment and its clinical management. This case report emphasis on need of rubber dam placement and proper positioning of patient during treatment procedures.

KEYWORDS

Foreign body, Ingestion, Bent irrigating needle.

INTRODUCTION

Foreign body ingestion occur commonly and in majority of the cases (80%), they will pass spontaneously without the need for intervention [1]. One major complication includes physical injury from swallowing or aspiration of foreign object. However, few studies have shown that in cases of intentional ingestion, the rate of endoscopic intervention may be much higher (63%-76%) and the need for surgical intervention ranges from 12% to 16%. [2,3]

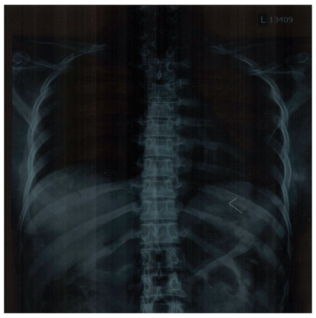
Once through the esophagus, most foreign bodies, including sharp objects, pass uneventfully. However, ingestion of sharp and pointed objects, animal or fish bones, bread bag clips, magnets, and medication blister packs increase the risk of perforation. [1] This case presents a successful journey of an accidentally ingested sharp bent irrigating needle, which suggests that a bent needle always need not get lodged in gastro intestinal tract, but there is also high chance of it getting expelled without any active intervention from physicians side. Under observation, wait and watch policy needs to be practiced if there is no immediate symptoms from the ingested sharp objects.

CASE REPORT

A 44 year old lady with no significant medical history presented at the emergency service of our dental hospital following the accidental ingestion of a sharp bent needle during routine dental treatment. A bent irrigating needle used by a student in course of endodontic treatment became loose, fell into the oral cavity and the apprehensive patient swallowed it. The needle became directly irretrievable.

Her general condition was stable without dyspnoea, nausea, vomiting or abdominal pain. Pharyngolaryngeal fibroscopic analysis revealed normal, suggesting passage of foreign body into the esophagus. An A-P view of chest, revealed a bent metallic radio-opaque object in the left side of the hypochondrium under the dome of the left diaphragm (Figure 1). The patient did not show any other signs and symptoms of foreign body ingestion. So, the case was planned to be managed conservatively with follow-up at 24 hours. The patient was admitted for strict observation and follow up. The patient up on advice consumed a lot of fibrous food like banana and 3-4 litres of water. After two days, the patient observed the bent needle in his stool.

Figure 1: A-P view of chest showing radiopaque object on the left side



DISCUSSION

Every dental personnel should consider the possibilities of such dental emergencies and be well prepared to handle the situations. When such event occurs, it is essential that clinician and their staff remain calm, composed and document the case properly [4]. The patient must be reassured and thorough clinical and radio graphical evaluation need to be done. If diagnosis of ingestion or aspiration is done early, patient could be treated or refereed appropriately. To have emergency referral hospital name, address, phone number handy in such situations to prevent adverse complications. With a thorough knowledge about the location of the foreign body and its associated risks, prompt decision must be made whether to actively remove the object or let it passively pass naturally.

If the object can be seen clearly in the oral cavity, finger sweeps could be attempted with caution to retrieve it. When the object is impacted in the airway, non-invasive procedures like back blows, Heimlich maneuver could be attempted [5]. In confirmed aspiration cases, bronchoscopic removal needs to be done [6,7].

Sharp pointed objects are associated with a higher risk of perforation. The perforation is most likely to take place in the esophagus, the pylorus, the duodenum, the duodenojejunal flexure & the ileocaecal region. Abdominal perforation should be suspected if objects remained lodged longer that two weeks, surgical intervention is required [8].

Although majority of sharp – pointed objects in the stomach will pass without incident, the risk of a complication caused by a sharp pointed object is as high as 35% [9]. Patients should be instructed to immediately report abdominal pain, vomiting, persistent temperature elevations, hematemesis or melena. Otherwise, sharp –pointed objects may be followed with daily radiographs to document their passage, and surgical intervention should be considered for objects that fail to progress after 3 days. [10,11]

The use of fine needles within the confines of the oral cavity increases the likelihood of iatrogenic ingestion. This case high- lights the need for careful control of sharp dental instruments, in particular needles used for irrigation have to be locked properly, so as to avoid the grave consequences. The use of rubber dams, oral packing with gauze as a protective barrier or ligating small instruments when working in the oral cavity is necessary to prevent such mishaps along with proper sitting positioning of the patient in the dental chair [11,13].

Since majority of ingested foreign bodies pass spontaneously, conservative management is justified as long as the patient remains clinically stable without turning septic or peritonitic.

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