

## Accidental ingestion of fixed partial denture

**Dear Editor:**

Fixed partial dentures are commonly made in routine dental practices, however accidental swallowing of these odontogenic foreign bodies is an infrequent emergency in dental clinics [1]. A 43 years healthy female patient reported to us with missing fixed partial denture since a day. Patient had a fixed partial denture of three units in right maxillary molar region since 11 years and she stated her bridge had never come off before this. Patient and her family members were unable to locate the missing fixed partial denture in her surroundings. Patient was also unaware of its swallowing. Patient had no symptoms but was worried about the possibility of its ingestion. A frontal abdominal radiograph was advised and it revealed presence of radioopaque foreign body consistent with three unit's fixed partial denture in the stomach (Fig-1). Foreign body in radiograph did not show any pronounced sharp edges. As patient was asymptomatic, she was advised to start the laxatives and was kept under close monitoring. Radiograph was repeated on third day which revealed the passage of fixed partial bridge into small bowel. On fourth day bridge passed into stools without problems (Fig-2).

**Fig-1: Ingested fixed partial denture in stomach**



**Fig-2: Radiograph after the successful passage of the fixed partial denture**



It has been reported that children, prisoners, psychotic individuals, alcoholics, mentally disabled individuals, patient who are nervous or restless, excessive gag reflex patients, obese and pregnant patients in whom there is increased intra abdominal pressure, patient with barrel chest, patient with small oral cavity, short palate, macroglossia are at great risk of ingesting or aspirating the foreign objects [2].

It is important to obtain chest radiograph in both frontal and lateral aspect to determine the position of foreign body if it is into the lung or in stomach or in some other anatomical location [3]. Fortunately, majority of foreign bodies entering oropharynx eventually pass through GI tract without complication, however there is potential risk of gut perforation which most commonly occurs at ileocecal junction and the sigmoid colon leading to serious consequences including death.

The shape and dimension of ingested odontogenic foreign body can affect whether it will pass through the gut without incidents. Foreign bodies thicker than 2 cms and longer than 5 cms will not likely leave stomach spontaneously and about 10-20 % will require removal from GI tract by endoscopy. The usual time taken for foreign body to traverse the intestinal tract is 2 to 12 days [4].

Although there are no guidelines to help make decision as to whether to let object pass or

retrieve it, it is prudent to consider retrieving a fixed partial denture containing multiple units as it appears that there could be increased risk of causing intestinal damage or bowel obstruction from unsuccessful passage of the object[3]. Dentist must be able to recognize such accidental conditions and must be aware of possible complication involved with it and make a timely decision along with appropriate medical specialist.

### References

1. Auluck A, Desai R. Accidental swallowing of a prosthesis Dent Update 2008; 35(8): 577-9
2. Obinata K, Satoh T, Towfik AM, Nakamura M. An investigation of accidental ingestion during dental procedures. *J Oral Sci* 2011; 53(4): 495-500.
3. Neustein S, Beicke M. Ingestion of a fixed partial denture during general anesthesia. *Anesth Prog* 2007; 54:50-51.
4. Lau G, Kulkarni V, Roberts GK, Broke-Utne J. "Where are my teeth" A case of unnoticed ingestion of a dislodged fixed partial denture. *Anesth Analg* 2009; 109: 836-8.

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