

Case Report

An unsuspected location for a swallowed denture

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Abstract

Usual presentation of an accidentally swallowed denture is odynophagia and at endoscopy the denture is seen in the upper esophagus. We report an unusual case of an impacted denture in the trachea, presented without any respiratory symptoms and removed via a technique based on direct laryngoscopy and tracheotomy.

Key words: denture, odynophagia, breathing difficulties, trachea

Introduction

Patients presenting with swallowed dentures in esophagus is not uncommon in ENT practice. Usually these get impacted in the upper esophagus just below the cricopharyngeus. Less commonly, these can get stuck in the mid oesophagus and rarely in the lower esophagus. For an otolaryngologist often it is not a problem to remove a denture in upper esophagus. However when it is lodged in the mid or lower esophagus it can be demanding, since removal of large dentures with spiky ends or wires is associated with higher complications. It is a usual practice to liaise with the gastroenterology or cardiothoracic team when attempting removal of dentures in the lower esophagus.

Occasionally, denture can be missed by the endoscopist or patient may totally be unaware of accidental loss of denture from his mouth and later present with chronic dysphagia, chronic cough, hoarseness or symptoms and sings of perforation. It is very rare for a denture to be aspirated in to larynx or trachea and be asymptomatic.

According to literature, main reasons for an aspirated tooth or denture are maxillofacial trauma, dental treatment procedures or ethanol intoxication and dementia². But in this particular

instance it is probably due to an ill-fitting denture. Potential complications due to dentures in esophagus include perforation of wall, cellulitis, abscess formation, erosion in to a major vessel and rarely tracheo esophageal fistula formation¹.

Case report

A 57 year old, previously healthy man had presented to his local hospital with a history of accidental swallowing of a denture consisting of three teeth, on the same day. He was transferred to our hospital for further management. The initial complaints were throat discomfort and odynophagia. He did not experience any kind of breathing difficulty, hoarseness or noisy breathing. Apart from hypertension which has been under control with medication he was medically fit. On clinical examination, he was in pain with limited neck movements. The oral cavity

And oropharynx were normal. Indirect laryngoscopy showed accumulated saliva in both piriform recesses. The lower part of neck at midline was tender. He did not have stridor and respiratory rate was normal.

The X - ray neck (soft tissue lateral) looked normal. (Fig .1)



Fig.1 apparently normal looking X ray but, tracheal shadow containing vague opacity below the larynx.

The patient consented for removal of Denture under general anaesthesia. Patient was intubated endotracheally. Rigid oesophagoscope however was met with considerable resistance while attempting to negotiate the cricopharynx. At this instance the endotracheal tube accidentally dislodged. When the Anaesthetist attempted to re-intubate, it too was met with resistance and the endotracheal tube could not be passed below the vocal cords and requested the ENT team to have a look.

When laryngoscopy was attempted a denture like object was visible at the sub glottis. During this process the airway was shared and anaesthesia was maintained by bag mask ventilation.

At this point the strategy was changed in consultation with the anaesthetist. A suspension laryngoscope and zero degree Hopkins rod telescope were employed to examine the glottis and subglottic area. The dislodged denture was visible at the lower trachea (Fig .2).

Fig. 2 Denture impacted at the lower trachea



The attempt to remove the denture using the telescope and appropriate grasping forceps failed as the denture was too large. Hence it was removed through a tracheostomy.

Discussion

Although this patient had a denture in the trachea, he did not experience any respiratory symptoms. On intubation there was adequate ventilation of the lungs and the Anaesthetist was able to maintain saturation satisfactorily. The difficulty noted on upper oesophagoscope was due to the pressure effect of the denture located in the cervical trachea on the upper oesophagus.

If the denture was in the lower trachea, there would not have been any difficulty in intubation and there was a high possibility that the foreign body could have been missed in the trachea. In this scenario the oesophagoscopy would have been essentially normal, and the assumption would be that the denture had migrated to the stomach.

In retrospect, a second look at the x-ray neck did reveal a vague shadow in the cervical trachea. Thus emphasizing the importance of standard radio opaque dentures in routine dental practice. A CT scan of the neck and chest would have been invaluable and would have helped surgical planning and consent.

Conclusion

A Large denture in the trachea could be asymptomatic. The clinician should be aware of this rare, potentially fatal possibility when managing a patient presenting with a history of "a swallowed denture".

References

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