

SUCCESSFUL RECOVERY OF DISLODGED TOOTH POST INTUBATION: A CASE REPORT

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Abstract

Dental Injuries are inadvertent complications associated with laryngoscopy and intubation. Tracheal intubation along with existing damaged, loose and malaligned dentition not only make the airway difficult but also lead to injury and dislodgment. This can lead to complications like airway obstruction, aspiration of tooth leading to lung collapse, pneumonia and in extremely severe cases can lead to esophageal perforation and mediastinitis. Such incidences can even lead to medicolegal implications against anaesthetist. So care should be rendered to meticulously prevent and manage this complication. Easy and preventable measures taken on time can restrain further associated complications. In the present case post intubation, upper left canine was dislodged and further intervention were taken to localise the missing tooth. Finally tooth was visible in pyriform fossa in X-Ray Soft tissue neck and was removed successfully with the help of Magill's forceps. Patient remained stable throughout the process.

INTRODUCTION

Dental injuries are inadvertent complication associated with laryngoscopy. Tracheal intubation along with existing damaged, loose and malaligned dentition can not only make the airway difficult but also lead to injury and dislodgment. This can lead to complications like airway obstruction, aspiration of tooth leading to lung collapse, pneumonia and in extremely severe cases can lead to esophageal perforation and mediastinitis. Such incidences can even lead to medicolegal implications against the anaesthetist. So care should be rendered to meticulously prevent and manage this complication. Easy and preventable measures taken on time can restrain further associated complications.^[1-3]

CASE REPORT

A 45 years old male was admitted to the hospital with chief complaint of pain abdomen followed by distension of abdomen since two days and was diagnosed as a case of perforation peritonitis for which emergency laparotomy was planned. Patient had multiple loose, buck and missing teeth for which patient was explained regarding the difficulty during laryngoscopy and probability of dislodgement of tooth. General anaesthesia was planned and prior to induction informed and written consent in patient's language was obtained explaining risk and benefits of

anaesthesia. All regular basic mandatory monitors were attached. Rapid sequence induction was done. Patient was intubated with oral endotracheal tube of size 8mm ID. While removal of a scope a very loose and decayed upper left canine was detected so attempt was made to tie the loose tooth to prevent it from dislodging in oral cavity, however before the attempt was made the tooth slid and got dislodged in oral cavity. The oral cavity was thoroughly examined under laryngoscopy however the tooth was not traceable. The head was flexed and nasopharyngeal cavity was thereafter examined using a light source and tongue depressor but the tooth was not located so on table X Ray was taken as patient was in supine position. On X-Ray the tooth was not visible. Considering esophageal dislodgment, an endoscopy was undertaken under anaesthesia however it was not located so patient was considered for extubation as the vitals were stable and respiratory efforts were good. Thereafter patient was reversed and successfully extubated. Post extubation patient was vitally stable and maintaining saturation. There was no emesis or sign of foreign body aspiration. Patient was advised to undergo a post operative X-Ray lateral view neck in sitting position. On receiving the X-Ray, the tooth was seen impacted in the pyriform fossa and with the help of a long Magill's forceps, the tooth was removed and handed over to the attendants. Throughout patient remained stable and no complication was reported.



X-Ray soft tissue neck revealing tooth in pyriform fossa



Successful retrieval of dislodged tooth

DISCUSSION

Patient's loose and malaligned dentures presents as a challenge to anaesthesiologist. During intubation and extubation tooth can dislodge and risk of aspiration

or ingestion of tooth is there. Unfavourable patient's anatomy, condition of tooth and supporting tissue, experience and skills of anaesthetist and shape of the intubating device also act as contributing factors.^[4-6] This case report emphasises the need for careful examination of dentures prior to surgery. In children, recently erupted teeth should be checked and any loose tooth on verge of shedding should be noted. Preoperative oral examination should be reported on dental chart and measures should be taken to secure loose tooth.^[7,8] In case of elective surgery, dental intervention can be sought to prevent dental injuries. In case of emergency procedure, loose tooth should be tied with silk suture wrapped around gingival margins. Risk of damage to teeth should always be explained to patient prior to intubation. Patient's denture should be examined after intubation and extubation and any significant finding should be documented. In case of avulsion of tooth, it is responsibility of anaesthetist to ensure that tooth or fragments are localised and removed. Recovered fragments and tooth should be handed over to the attendants or patient. Throwing of avulsed tooth can cause unnecessary litigations. Further this case report emphasises that proper meticulous approach should be followed to recover the tooth. This may require direct examination of oral cavity under direct laryngoscopy as all dental fragments are not radioopaque, immediate and mandatory X-ray of the neck and chest to exclude aspiration,^[9] HRCT chest, X-ray soft tissue neck. If tooth is suspected to be dislodged in esophagus, flexible esophagoscopy should be done. In our case we noticed dislodged left upper canine after intubation and in attempt to remove it, we losed grasp over tooth and it fell in oral cavity. We were not able to localise the tooth by digital examination of oral cavity under direct laryngoscope nor it was visible on chest X-ray. Flexible esophagoscopy also came out to be negative. Finally tooth was seen in X-ray soft tissue neck lateral view in pyriform sinus and removed with Magill's forceps.

CONCLUSION

Dental damage can be prevented by understanding the causes and techniques of minimising it. A meticulous pre anaesthetic dental examination should be done. Patient should be informed of the risk of dental injury and it must be registered in writing. Easy and preventable measures should be taken on time to prevent further complications.

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