CASE REPORT

SUBMENTAL APPROACH FOR TRACHEAL INTUBATION IN PATIENTS WITH PANFACIAL FRACATURES - A CASE REPORT
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ABSTRACT
Sunmental approach for tracheal intubation is a simple procedure instead of tracheostomy in the management of complex panfacial fracture patients. This paper reports the successful management of a panfacial fracture with submental intubation.

Keywords: Panfacial fracture; Submental Approach; Tracheal intubation; Panfacial fracture

Introduction

The standard oral route for tracheal intubation can be unsuit- able for some maxillofacial surgeries. It can interrupt the sur- gical field and can interfere with teeth occlusion frequently needed for the adjustment and fixation of maxillary fractures.1 This paper reports the successful management of a panfacial fracture with submental intubation. This approach can be considered as an alternative for tracheostomy when needed for optimal surgical access.

Case Report

A 51-year-old patient with a maxillofacial fracture following a road traffic accident was reported to the MS Co-operative Hospital, Panambi, Perinthalmanna, Malappuram, Kerala, India. Clinical examination shows extra oral laceration includes laceration on the forehead, upper lip, and rhinoplasty. Intra oral examination reveals laceration of hard palate, altered occlusion, mid line fracture of hard palate with mobility of the maxillary segment. Radio graphic examination confirmed Le Fort II fracture with nasal bone and hard palate split. The consent from the patient was obtained and open reduction and internal fixation under general anaesthesia was planned.

Procedure:
The vital parameters and preoxygenation was obtained and open reduction and internal fixation under general anaesthesia was planned. Intermaxillary fixation is used as a guideline to panfacial trauma, temporary intermaxillary fixation (jaw wiring) is required intra-operatively, in patients undergoing simultaneous elective mandibular orthognathic surgery and rhinoplasty procedures, and in cleft lip and palate patients undergoing orthognathic surgery. In these cases nasal obstruction may preclude the use of a nasal tube. In our case maxillo-mandibular fixation was needed to achieve occlusion intraoperatively and which would have not been possible with the orotracheal intubation technique.

Figure 1. Preoperative view, Figure 2. Intraoperative view

Submental tracheal intubation also avoids the potential com- plications associated with nasal intubation and tracheostomy and obviates the need for a tube change during the opera- tion.6 Sub-mental endotracheal intubation is not completely free from complications. There is a risk of arterial desatur- ation during the conversion of oral intubation to sub-men- tal intubation and vice versa. Pilot balloon can also be damage during the tube transfer or there may be difficulty in passing the tube through the incision or reattaching the connector to the endotracheal tube.6

Conclusion

In conclusion, sub-mental intubation is a simple alternative air- way management compared to tracheostomy when simulta- neous rhinoplasty procedures and maxilla-mandibular fixa- tion are indicated.

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References

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