應用頦下路徑氣管插管於複雜顏面骨折手術之經驗

陳恆棠 李安莉 倪宗聖 黃文成
馬偕紀念醫院 整形外科

Submental Tracheal Intubation for Complex Facial Bone Fractures

Heng-Chang Chen, An-Li Lee, Tsung-Sheng Ni, Wen-Cheng Hwang
Department of Plastic Surgery, Mackay Memorial Hospital

Purpose:
Management of the airways in the presence of midface or panfacial injuries with mandibular involvement requires special consideration. While the choice of intubation between orotracheal and nasotracheal routes may not permit good exposure of the operation field at midface and mandible simultaneously, there is an alternative transcutaneous submental route before jumping to tracheostomy.
In this study we present an analysis of 8 consecutive cases with a review of the literature, emphasizing technical details, indications and complications of this technique.
Materials and Methods:
The patient is usually first intubated with a regular endotracheal tube through oral route. An incision is then made at central submental area to pass a non-kinking endotracheal tube through oral base, and then replaced the orotracheal tube with assist of an exchanger. On completion of the operation, the non-kinking tube is transferred to oral route by retraction to the oral cavity, then extubated following traditional considerations.
From May 2008 to March 2011, eight sufferers from facial trauma benefited from submental intubation. There are six males and two females, and the ages ranged from 18 to 49 years (mean, 31.5 years).
Results:
In all the patients, the submental intubation permitted simultaneous reduction and fixation of all fractures and intraoperative control of the dental occlusion without interference from the tube during the operation. There was only one post-operative complication with wound infection from prolonged submental intubation after the operation.
Conclusion:
Submental intubation is a simple, secure and effective procedure for operative airway control in major maxillofacial traumas.