

[A-13] Repetitive Cosmetic Surgery Procedure Using Submental Intubation: A Shared Operative Field

Akbar Ali A, Siddiqui M, Alfonso W, Lewis R, Suleman M
Arkansas Children's Hospital , Little Rock , AR, United states

Introduction: Submental intubation is an alternative to tracheostomy in patients requiring surgical access to both oral and nasal cavities. 1 It is relatively safe and low morbidity procedure and requires only basic surgical equipment to perform. 2 We successfully performed a submental intubation in a young patient with maxillofacial hypoplasia undergoing Le Fort I maxillary advancement without any perioperative complications.

Case description: A young female patient with craniofrontal and mid face dysplasia was scheduled for Le Fort I maxillary advancement. After application of standard monitors and preoxygenation, slow inhalational induction was performed. Patient was kept spontaneously breathing and intravenous access was acquired. Bilateral nares were prepped using Oxymetazoline nasal spray in anticipation of nasal intubation. A trial of inserting 14 French catheter through nares was unsuccessful. Fiberoptic visualization revealed distorted anatomy probably secondary to previous surgical procedures. Per back up plan, after controlled intravenous induction, direct laryngoscopy with Macintosh size 3 blade was performed and grade III view was observed. A 6.0 reinforced endotracheal tube was inserted and secured temporarily. A small incision was placed through the skin in the submental region by the surgeon. A curved hemostat was inserted through the skin incision to gain access to the floor of the mouth. The access was established on the lingual surface of the mandible in order to avoid injury to Lingual nerve and artery, and Wharton's Duct. Proximal endotracheal tube connector was taken off and tube was pulled through the skin incision using hemostat. Tube was sutured and secured. After completion of the procedure, endotracheal tube was pulled back into the oral cavity, submental incision was sutured and patient was extubated. No complications were noted in post operative period.

Discussion: Establishing a secure airway for maxillofacial procedure was not without major complication until 1986 when the submental route of intubation was first introduced by Hernandez. 2 Since its introduction, several institutional reviews have been published demonstrating its safety and efficacy. 2, 3, 6 Although tracheostomy has been a time-tested option, it has major post-operative complications like infection, prolonged hospital admission, and tracheostomy care expenses. By decreasing the number of emergent and controlled tracheostomies, considerable decrease in post-operative complications and management cost have been shown. On the other hand, retromolar intubation might not be the option in many patients due to inadequate retromolar space.

Submental intubation is a surgical airway management technique that has shown to be relatively safe, is largely accepted by surgeons and patients, and does not involve substantial morbidity. 1, 6

References:

1. Meyer C et al. J Craniomaxillofac Surg. 2003 Dec;31(6):383-8.
 2. Gadre KS et al. J Craniofac Surg. 2010 Mar;21(2):516-9
 3. Adeyemo WL et al. Niger J Clin Pract. 2011 Jan-Mar;14(1):98-101
 4. Lima SM Jr et al. J Oral Maxillofac Surg. 2011 Jul;69(7):2001-5
 5. Junior JM et al. Ulus Travma Acil Cerrahi Derg. 2012 Nov;18(6):545-8
 6. O'Connell JE et al. Ir J Med Sci. 2012 Dec 8.
-