

## 44365 - ANTICIPATED DIFFICULT INTUBATION

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**Ibrahim Abu-Shahwan, Children Hospital of Eastern Ontario, Ottawa, ON, Canada;**

*Khalid Chowdary, Children Hospital of Eastern Ontario;*

*Christine Lamontagne, Children Hospital of Eastern Ontario;*

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**Introduction:** Treacher-Collins syndrome (TCS), also known as mandibulofacial dysostosis, is a rare genetic syndrome. Patients with TCS have maxillary, zygomatic, and mandibular hypoplasia. Endotracheal intubation may be difficult or impossible in patients with TCS or other mandibulofacial deformities, when conventional methods are used. TCS has been associated with difficult tracheal intubation and airway obstruction (1).

**The case:** A 17-yr old weighting 50-kg patient with TCS was scheduled for adenoidectomy and mandibular osteotomy. Preoperative findings showed the characteristic facial features of TCS, and difficult endotracheal intubation was anticipated. After discussion with patient and parents, awake fiberoptic endotracheal intubation, and retrograde intubation as a second choice option was agreed upon. After sedation with midazolam and fentanyl, lidocaine spray 10% was applied to provide anesthesia of the oral cavity. Bilateral superior laryngeal nerves and recurrent laryngeal nerve blocks were performed using lidocaine 2%. For the adenoidectomy the otolaryngology surgeon preferred an orotracheal intubation for an optimal surgical result and for the mandibular advancement a nasal endotracheal intubation was indicated, as this surgery requires intermaxillary fixation. Awake fiber optic intubation through the oral cavity was successfully performed after the first attempt. Once the surgical removal of the adenoids was completed the proximal end of the tube was sutured to a suction catheter that was inserted through the nasal cavity, the cuff deflated, the tube pushed further into the trachea and pulled back through the nasal cavity. The pilot balloon and inflation valve were cut and pulled back from the nasal cavity using a smaller suction catheter. An intravenous catheter was inserted into the cut end of the tubing leading to the inflatable cuff, and this was connected to a stopcock and a syringe, to reinflate the cuff. After successful completion of both operations, the patient was transferred intubated to the intensive care unit for further monitoring.

**Discussion:** the anesthesiologist's first choice when dealing with a patient with difficult airway is awake endotracheal intubation (2). The surgical need for oral followed by nasal intubation in the patient with a difficult airway can pose a unique challenge. Awake fiberoptic intubation followed by retrograde nasal intubation was successful in securing and maintaining the airway in this case. This technique can provide an additional option for the management of the patient with anticipated difficult airway.

### References:

- 1- Laryngoscope 1998; 108: 1806-1812.
- 2- Best Pract Res Clin Anesthesiol 2005; 19: 611-621.