

## **PO 29 - SUBTOTAL MANDIBULECTOMY FOR AMELOBLASTOMA RESECTION: AN ANESTHETIC APPROACH**

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**Background:** Ameloblastomas are rare odontogenic tumors that mainly affect the jaw. Usually benign but locally invasive, frequently cause facial distortion. Treatment often implies aggressive surgery with en bloc resections and reconstruction to restore function and aesthetics.

**Case report:** 16 years old female, ASA I, with bilateral jaw ameloblastomas underwent a 12-hour surgery for subtotal mandibulectomy plus reconstruction using a free fibula flap. She had an anticipated difficult airway due to limited mouth opening and neck distortion. An awake intubation approach using dexmedetomidine, ketamine and laryngotracheal topical anesthesia with nebulized lidocaine was performed. Intubation was achieved after 3 attempts using a videolaryngoscope. Anesthesia was maintained with remifentanil and propofol infusion combined with epidural block. Afterwards, a tracheostomy was placed for airway protection. Prior to extubation dexmedetomidine (0,3mcg/Kg/h) was reinitiated and kept for the first 12 hours after surgery. Emergence from anesthesia was uneventful. No pain or airway compromise were registered during the immediate postoperative period. A multimodal analgesia regimen was used, including bilateral mandibular nerve block. She received PCEA for flap donor site pain relief.

**Discussion:** The use of videolaryngoscopy for awake intubation has become more popular in recent years. The type of sedation used is not standardized but often based on the Anesthesiologist's own experience. Dexmedetomidine off-label use in this context appears to be safe and efficient. Its combination with ketamine provides great sedation with minimal respiratory depression. When infused alone at the end of surgery, it led to a smooth emergence, which is imperative in these cases. Pain control is also of great importance, with regional analgesic techniques assuming a relevant role.

**Learning points:** Ameloblastoma surgery is complex and challenging. A meticulous anesthetic plan with anticipation of a possible difficult airway is crucial. Multimodal analgesic regimens including regional techniques provide optimal perioperative pain control in such aggressive surgeries.

### **References:**

1. Wilson WM, Smith AF. The emerging role of awake videolaryngoscopy in airway management. *Anaesthesia*, 73. 2018;1058–61.

2. Boffano P, Cavarra F, Tricarico G, Masu L, Brucoli M, Ruslin M, et al. The epidemiology and management of ameloblastomas: A European multicenter study. *J Cranio-Maxillofacial Surg.* 2021;49(12):1107–12.



