TRANSIENT HYPOGLOSSAL NERVE PALSY FOLLOWING GENERAL ANESTHESIA: A CASE REPORT AND REVIEW

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Introduction: During general anesthesia (GA), the nerves of the pharyngolaryngeal region may be injured. The most frequently injured are the hypoglossus, lingual and recurrent laryngeal. The factors that can influence this type of lesions are: laryngoscopy, endotracheal intubation, orotracheal tube insertion, pneumotaponic pressure, supraglottic device insertion, head and neck position, among others. In the case of supraglottic devices, in up to 50% of surgeries carried out with GA are used and can be associated with minor pharyngolaryngeal complications, being paralysis of just the hypoglossal nerve rare, as we described in the case report below.

Case report: A 22-year-old female patient weighing 47 kg with a personal history of anxiety-depressive syndrome, anorexia nervosa, and two previous surgical interventions for muscle fascial interposition as a sequel to elbow trauma. New surgical procedure with the aim of reducing pain and improving joint mobility. Arthrotomy and arthroplasty with interposition of fascia are performed. After premedication, supraclavicular echo guided nervous block is performed without incidences. Subsequently, induction of GA and placement of supraglottic device Nº3 was placed ( sevoflurane 0.8 MAC in O2 40%). Position in supine position. Surgical intervention without incidence with a duration of 97 minutes. In the immediate postoperative period, the patient reported difficulty in swallowing and speaking, lingual deviation to the right, edema and loss of taste sensitivity in the two-thirds anterior right. Immediate treatment begins with dexamethas 12 mg / day intravenous during 48 hours and rehabilitation. Start of recovery from the 7th postoperative day. The third postoperative month total recovery without sequel.

Discussion: Isolated paralysis of the hypoglossal nerve is a rare entity. It is a purely motor nerve and innervates the intrinsic and extrinsic musculature of the tongue with the exception of the palatoglossus muscle; Its nucleus is on the floor of the IV ventricle, ascends above the major horn of the hyoid at the level of the jaw angle, where it is more vulnerable by compression due to over distension or malposition. The clinic consists of a deviation of the tongue towards the affected side along with muscle weakness, dysarthria and dysphagia. The lesion is usually unilateral, usually associated with laryngoscopy and orotracheal intubation. Other causes are the use of laryngeal mask, application of pressure and direct compression of the nerve under the angle of the jaw during ventilation with face mask. It is most frequently associated with dental and otorhinolaryngological procedures. Most patients have an almost complete recovery within 6 months with adequate corticosteroid treatment and rehabilitation.

Conclusions: Isolated paralysis of cranial nerves after GA is a rare entity. Special attention should be paid to evaluations in the immediate postoperative period, with a careful questionnaire and
evaluation by a multidisciplinary team of anesthesiologist, neurologist, otolaryngologist, and in some cases, psychiatrists. Accurate and careful management of the airway during GA reduces risks.

Bibliography: