Tapia Syndrome after Heart Port Repair Mitral Valve - A Case Report

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Received: February 02, 2020; Published: February 27, 2020

Abstract

We describe here a rare case of Tapia Syndrome: a combined paralysis of the hypoglossal vagus (X) nerve (XI) and sometimes also glossopharyngeal (IX). The syndrome can occur after diagnostic or surgical maneuvers of the upper airways. To date, 69 cases have been reported in the world literature. This that we describe today is the 70th.

Keywords: Airways Management; Heart Port Cardiac Surgery; Recurrent Laryngeal and Hypoglossal Nerve; Tapia's Syndrome

Introduction

Tapia Syndrome (ST) is a rare syndromic manifestation of extracranial paralysis of the X, XI and XII nerves described by Antonio García Tapia, a Spanish otolaryngologist (1875 - 1950). Tapia Syndrome usually due to a neck injury affecting the hypoglossal (XI) and the vagus (X) at the point where the two nerves meet in the pharyngeal-maxillary triangle; sometimes the n. glossopharyngeal (IX). Clinically, it causes disorders of the motility of the tongue (lingual hemiparesis) and disorders of the voice (bitonal voice due to paralysis of the recurrent laryngeal nerve; when the glossopharyngeal nerve is also involved there is also a moderate to severe swallowing disorder. Lesion of these nerves may be a rare complication of airway management. It is generally caused by trauma or cervical tumors but in the medical literature cases related to orotracheal intubation, transesophageal ultrasound is described when predisposing anatomical conditions coexist as in long-thin or very lean subjects [1-10].

Case Report

A very thin caucasian patient - S.M. 65 yr Weight 54Kg - Height 177 cm with a Severe Mitral insufficiency caused by a Mitral Valve Prolapse P2 and P3 scallops. Not reported Allergies Tonsillectomy - Appendicectomy - Mediterranean Anemia - Pectus Escavatum - Preop-Echocardiogram: wide mitral valve prolapses of P2-P3 severe regurgitation. Admitted in ICU for postoperative monitoring and to receive hemodynamic monitoring and post-surgical ventilatory support after being subjected to Mitral Valve Repair procedure in Heart Port Mini thoracotomy. Following, progressive respiratory and hemodynamic weaning was conditioned by a post-operative malfunctioning of the right ventricle and small right pneumothorax. Extubation was carried out on the first day. He was transferred to the cardiology department on the 4th day but then he returned 48 hours later in the ICU for respiratory failure. He was mechanically ventilated for one day until

Citation: Enzo Primerano., *et al.* "Tapia Syndrome after Heart Port Repair Mitral Valve - A Case Report". *EC Anaesthesia* 6.3 (2020): 01-02.

successful extubation. In the following days he continued with spontaneous breathing with NIV and Boussignac support; After ten days he underwent a percutaneous tracheostomy sec. Griggs 7.0 mm Ø. However, after the tracheostomy an important deficit of swallowing with regurgitation and profuse sialorrhea was highlighted. The esophagus- gastroscopy did not reveal any pathology affecting these organs. Given the persistence of the swallowing deficit and sialorrhea, the patient underwent Percutaneous Endoscopic Gastrostomy (PEG). After evaluation of the otolaryngologist, a diagnosis of Tapia Syndrome is made, and he is sent to rehabilitation of swallowing. The patient, already decannulated previously by the tracheostomy, after a few weeks of rehabilitation of swallowing, he started eating again on his own and the PEG was also removed. Throughout the hospital stay, the patient needed continuous nursing care for a clinical reactive depressive anxious syndrome treated with sertraline. Currently the patient is in good health.

Conclusion

Fundamentally relevant in the diagnosis of this syndrome is the persistent sialorrhea and the coexistence of a defect in swallowing and an early observation with nose pharyngeal airway endoscopy by an otolaryngologist and a specific program of swallowing rehabilitation for the proper management of Tapia's syndrome.

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02