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Giant Tonsil Teratoma

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ABSTRACT

The case presented is one extremely rare of giant tonsil teratoma with oropharynx localization, with palatine left tonsil origin, inducing respiratory failure, swallowing and phonetic disorders.

This paper is based in a study case of a giant tonsil pediculous teratoma with slow evolution, with tolerancy, due to some diagnosis errors, developing respiratory failure and swallowing difficulties.

Keywords: tonsil teratoma, respiratory failure, swallowing and phonetic disorders

Introduction

The teratomas are made form obvious tissues, with ectodermal, mezodermal and endodermal origins, in various percents[1,2]. There are commonly benign and asymptomatic and they could rarely produce a strange and different clinical picture, depending of the germinal cells different potential. We frequently find teratomas in children at the level of the sacrococcygeal region (up to 40%), gonadal, mediastinal, retroperitoneal, liver or central nervous system [3,4,5].

Cervical-cephalic teratomas have low incidence (aprox. 2% of reported cases). At the level of the head and neck, teratomas are placed in: central nervous system, orbit, infratemporal fossa, oropharynx, nasopharynx, nasal cavity, palatine bone or palatin tonsil [2,3,6].

The teratomas are found during the neonatal period or after the first decade of the life. In the neonatal period, although the lesions look like benign evolution, they are associated with a high level of mortality, especially because of the impaired respiratory function. After the first decade of life, the teratomas have particulary small dimensions and malignant susceptibility [7,8].

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Embryogenesis

A specific origin of the teratomas is unknown. A lot of theories are submitted.[9] These theories include the germinal cells theory, the embryonal cells theory, the extraembryonal cells theory, according with the classification of teratomas (Apud Gonzalez-Crussi F: Extragonadal teratomas. In Atlas of Tumor Pathology, 2nd Series, Fascicle 18. Washington, DC: Armed Forces Institute of Pathology)

Figure 1 Mature teratoma with mezodermal derivations (cartilage), endodermal (respiratory glands) and ectodermal (tegument)

Figure 2 Immature teratoma with primary neuroectodermal tissue

Clinical case report

14 years old girl patient with a medical history of more antibiotic out-patient cures, with low effects.

Treatment

2 steps surgical treatment:

The first surgical step consisted in the emergency surgical intervention because of the patient's respiratory difficulty breathing. It consisted in the ligation of the pediculum and the electrocautery mode resection of the tumor [1,10].

Figure 3 Macroscopic preoperative image

Figure 4. Intraoperative image

Figure 5 Resected form

Histopathological examination proved the tonsil teratoma

BHP – 5709/16.02.2012 – mature teratoma with sebaceous glands structure, lymphoid structures and follicles; ulcerate pavement epithelium with hemorrhagic and granulomatosis infiltration.

Between the two surgical steps, the clinical and paraclinical examinations didn't prove any pathological changes. The examinations were also done to highlight another possible congenital associated abnormalities.

The second surgical step occurred after approximately 2 weeks from the first step and it consisted in tonsillectomy; the histopathological examination highlights normal tonsil structure.

B.H.P. 8155/03.03.2010 – lymphoepithelial tonsil structure, with papillomatosis, hyperkeratosis and moderate dysplastic areas of the pavement epithelium, with keratinical content holes, sharpened reactive hyperplasia of the lymphoid follicles and the germinative centers, inflammatory granuloma process with hemorrhagic areas and necrosis.

Without intra and postoperative complications.

Discussions

The teratomas are tumors with different types of tissues in their structures, apart of their original areas; they have very different localizations in any area of the body.

The structure of teratomas could be benign or malignant. The sacrococcygeal localization is the most common. Other localization: head area, orbita, nasopharynx area, thyroid gland, cervical, mediastinal or retroperitoneal area [11].

The etiology and the pathogenesis of the teratomas are still uncertain, there are a lot of proposed theories. In a theoretical way, some possible sources of the teratomas are the spread of embryonal and extraembryonal cells. In the anterior cervical localization teratomas, one origin source can be the embryonal cells of the primordium thyroid gland.

Associated abnormalities

The scientific literature confirms that the cervical area teratomas could be associated with cystic fibrosis, left ventricular hypoplasia and lung hypoplasia, fetal chondrodystrophy or imperforate anus [5,10].

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