Acta Scientific Otolaryngology (ISSN: 2582-5550)

Volume 3 Issue 9 September 2021

Case Report

Cervical Localization of a Mature Pluritissular Teratoma: Case Report

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Received: June 21, 2021

Published: July 26, 2021

Abstract

The teratoma is a tumor originating from pluripotential cells and composed of a great diversity of tissues foreign to the organ. Its cervical localization is rare. The management remains surgical in order to avoid complications and reduce the risk of malignant transformation. We report a case of low cervical localization in an 11-year-old girl. Clinical examination and ultrasound of the tumour evoked goiter. The histopathological results, after total excision of the operating room, concluded to a mature pluritissular teratoma. The rare possibility of a recurrence of this benign tumor justifies a long-term follow-up of this young patient.

Keywords: Teratoma; Cervical; Mature; Pluritissular

Introduction

The teratoma is a tumor originating from pluripotential cells and composed of a great diversity of tissues foreign to the organ or anatomical site on which it occurs [1,2]. Il is a rare tumor, 1/40000 births. Cervical localization accounts for 1.5 - 5% of all localizations [3,4]. It is associated with a high mortality rate of up to 80% in the neonatal period due to airway obstruction [5]. His diagnosis is often antenatal, ultrasound or magnetic resonance imaging (MRI). Management must be urgent and multidisciplinary to avoid complications related to compression, but also to reduce the risk of carcinological [6]. We present a case with antero-cervical localization observed in the ENT department of the Brazzaville University Hospital.

Case Observation

p. N, female, aged 11 years, who had consulted for a voluminous low antero-cervical mass. This mass, initially not very voluminous, would evolve for 1 year. She had clinical characteristics of a thyroid tumor: sitting in the thyroid area, mobile to swallowing. The mass was renitent at the palpation, bumpy, tense, painless, measuring 12 cm in diameter on its major axis. The rest of the somatic examination was normal. The interrogatory did not find a notion of dysphonia, nor of dyspnea. physical examination did not reveal any other associated malformation.

Inflammatory blood tests (blood count, C-reactive protein), thyroid hormones (TSH, FT4, FT3) and markers of certain embryonic

tumors such as alfa-foetoprotein and beta-hCG (beta fraction of chorionic hormones gonadotrophiques) were normal.

Cervical ultrasound revealed a polycystic goiter. Chest X-ray was normal.

The surgical decision was made for the realization of an extra-capsular total thyroidectomy. The intervention made it possible to highlight per operatively a juxta-thyroid cystic formation, pediculated, of 11 x 8 x 3 cm. Complete excision of the tumor was done by progressive dissection.

Histological examination of the excision piece showed: a cystic tumor proliferation, whose wall is composed of several heterologous tissues, including cartilaginous, bony, glandular salivary type and many others. There was no sign of malignancy. This result confirmed the diagnosis of a mature multitissular terome.

Post-operative follow-up, with a two-year setback, did not note a recurrence.

Discussion

Very different from dysembryoplasia, the teratoma contains tissues foreign to the region that houses it and resembling those that follow one another during development, from the embryonic stage to the adult stage. The teratoma is a germ cell neoplasm made of a differentiation of three primordial leaflets, ectoblastic, endoblastic and mesoblastic. It almost always presents as a tumor [1,7-9]. Cervical teratoma is an exceptional congenital tumor. It most commonly develops in the thyroidal t-area (our observation). It is considered come a thyroid cyst [10-12]. The intervention will therefore make it possible to recognize the juxta-thyroid character of the cystic mass. Localization in the submandibular area was also described [9]. Azizkhan RG [3] reported that the cervical teratoma is often accompanied by other malformations. On the other hand, in our observation, the cervical teratoma was not associated with other malformations. In some cases, it is a voluminous, congenital tumor, incompatible with life due to its compressive tendency of the aero-digestive tract and responsible for respiratory distress. The cervical teratoma also has an unsightly character [4]. On the other hand, when the tumor is small, it can pass into its perceived and then quickly take a considerable development. This most often explains the late consultation.

Ultrasound was the first-line examination, due to the disadvantaged socio-economic context. It is indicated before any mass increasing in volume in order to search for its malformative etiology. It highlights a cervical mass with a tissue and cystic component, with, sometimes, calcifications. This examination is usually supplemented by magnetic resonance imaging (MRI), which gives more details and eliminates other diagnoses [6]. These data change surgical management and prognosis.

The physical examination as well as the ultrasound results (in our observation), which have oriented towards a polycystic goiter, show that itis a tumor requiring to be always better explored.

Cervical teratomas should be differentiated from latero-cervical fistulas, gill cysts, latero-cervical tonsdalaloid cysts, cervical congenital cystic hygroma, cervical hemolymphangiomas, thyroid tumors, inflammatory adenopathies (or blood diseases), salivary gland tumors, lymph node metastases of carcinomas or sarcomas, and other tumors such as leiomyosarcomas, hemangiosarcomas, fibrosarcoma's, osteosarcomas and mesenchymomas [13,14].

The diagnosis of teratoma requires insurance regarding its benign or malignant nature, which would guide the therapeutic attitude. In its benign form, all the tissues present are mature and have reached the end of their differentiation [1]. If the existence of some cellular immaturities does not have great prognostic importance, it is not the same for the more marked cellular atypia or other usual criteria of malignancy [15]. Our case, corroborates with the literature, reported a cystic tumor proliferation consisting of cartilaginous, bony, glandular tissues of salivary type and well autres. The term dermoid cyst is applied to mature cystic teratomas essentially composed of epidermal tissue associated with pilosebaceous appendages [16]. The mature teratoma most often contains derivatives of the ectodermal layer such as the skin, hair and sebaceous glands. Mais, any other tissue can exist in particular thyroid tissue, found in 15% of cases [17].

Surgical excision was easy because, the teratoma has a plane of cleavage with respect to the tissues and organs of neighborhood. It has only weak vascular connections [18,19]. It is necessary to carry out a total excision of the tumor and to make multiple removals so as not to mass undifferentiated, malignant area whose presence can change the prognosis [20,21]. Hence the importance of the extemporaneous, not available in our country.

The evolution over time of the levels of alfa-foetoprotein is necessary for the follow-up of patients with cervical teratoma. Their evaluation or maintenance at high values should raise fears of the existence of a malignant contingent in the form of recurrence and/or metastasis. In the case of benign lesions, complete excision allows a gueridon which should not exclude regular clinical and biological follow-up. Faced with a malignant lesion, rare and can worsen the prognosis of the disease, surgery will be supplemented by chemotherapy and/or radiotherapy [22].

Conclusion

The existence of a low antero-cervical mass poses the problem of etiological diagnosis of a thyroid tumor, dysembryoplasia or teratoma whose histological analysis of the excision piece will best specify the tumor nature. In the case of a benign teratoma, although the excision is complete, clinico-biological monitoring should be instituted.

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Volume 3 Issue 9 September 2021