CASE REPORT

Three kinds of cysts in the same patient

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ABSTRACT
An 18-year-old male patient presented with a swelling in the neck with presumptive diagnosis of epidermal cyst (EC) that was enucleated, histopathological examination confirmed the diagnosis. Four years later the patient presented with another swelling with similar clinical features. It was located on the midline of the neck at the hyoid bone. Excision of cyst was done and microscopically it showed features of thyroglossal duct cyst (TDC). Two months later a new swelling was noted on the right side of the neck. A complete surgical excision was done and the lesion was diagnosed as a lymphoepithelial cyst. The purpose of this report was to analyze each of the entities that were present in this case; since, the presence of three different cervical cystic lesions in the same patient is uncommon.

Key words: Epidermal cyst, lymphoepithelial cyst, multiple cyst, thyroglossal cyst

INTRODUCTION

Congenital cervical swelling constitutes a heterogeneous and infrequent group of lesions, which habitually are diagnosed in neonates or during early childhood and includes entities such as thyroglossal duct cyst, bronchogenic cyst, cystic hygroma and laryngocele. TDC originates by partial involution of the thyroglossal duct. The frequency of the TDC is 7% in adults and is considered by some authors as the most frequent congenital augmentation in head and neck, constituting 70% of these lesions.[1-3] The lymphoepithelial cyst or branchial cleft cyst (BCC) has been reported in locations such as the pancreas, thyroid gland, parotid and oral cavity; but its localization is specific in the neck, where it is derived from the second branchial arch, constituting the most frequent entity (75%) of the branchial anomalies.[4-10]

CASE REPORT

An 18-year-old male presented with a history of asymptomatic swelling (3 × 5 cm) in the lateral region of the neck at the level of the mastoid, that was present since 2 months. It was fluctuant to palpation and freely mobile. A presumptive diagnosis established was of an epidermal cyst (EC); therefore, the lesion was extirpated. The content was caseous white-yellow material. From histopathological findings, it was reported as EC. After surgical intervention a hypertrophic scar developed as a complication.

After 4 years and 10 months, there was a swelling that was increasing in size (4 × 2 cm) at the level of the hyoid bone. On physical exploration, the soft mass was at the level of the hyoid bone, which at the time of deglutition moved to the left side. An axial tomography was taken and a presumptive diagnosis of a TDC was established [Figure 1a and b]. The surgical procedure was carried out 2 months later without apparent complications and the specimen was submitted for histopathological study, the results were in favor of a TDC [Figure 2a]. Five days after surgery, the aponeurotic space was swollen and the patient complained of hypoesthesia, the patient presented a sensation of asphyxia that forced him to put the head in hyperextension in order to breath, after 3 days the sensation became worse and there was the need to debride. Draining yielded a thick yellow-liquid similar to lymph. A Penrose was placed and was kept for 4 days, the post operative condition was uneventful.

After 2 months of the TDC surgery, the patient came again with a tumefaction on the right side of the neck close to mandible angle of approximately 3 cm, the presumptive diagnosis was an infected sebaceous cyst and medication was prescribed (10 mg Danzen®, Serratio Peptidase, Laboratory Hormona, Mexico) daily for a week. The cyst was enucleated on the same month without complications. The final histopathological report was of a branchial cyst [Figure 2b].

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DISCUSSION

It has been reported that if a part of the TDC persists, it may induce an inflammatory process that produces hyperplasia in the adjacent lymphoid tissue, leading to the accumulation of secretions. This could explain the higher incidence in children in whom the infection of upper airways is frequent. Regarding the distribution by age, approximately 50% of the cases are reported in patients under 20-years of age with a second peak of incidence in young adults. Most of these anomalies (75%) arise from remnants of the second branchial cleft. In this case, the patient was over 20-years-old, at this age the TDC is an uncommon entity with a potential complication of malignant transformations.

The EC is relatively frequent lesion in the region of the head and neck, being covered by squamous epithelium derived from the ectoderm. The interior of the cyst is occupied by a colloidal, yellow, aqueous and serous substance; which if not treated properly, could transform into a papillary carcinoma. This tumorization is the most common variant observed in 1% of all cases, but it also could transform to an adenocarcinoma or carcinoma of squamous cells. Some times to describe this. The term “branchial cleft-like cyst” (BCC) has been used for cervical lymphoepithelial cysts located in neck.

In conclusion the cyst of the thyroglossal duct and the lymphoepithelial cyst are relatively infrequent entities, but both entities in the same patient are exceptional, since these anomalies were presented in chronological order. These pathologies EC, TDC and BCC could have more complications if not detected in proper time, having the risk of becoming a malignant lesion.

ACKNOWLEDGMENT

It’s very important to recognized the help of maxillofacial Honorio Olvera Delgado for contribution in development of this case report in Universidad Autónoma de San Luis Potosí.

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How to cite this article: Garcia-Cortés JO, Reyes-Macias JF, Loyola-Rodriguez JP, Patino-Marin N. Three kinds of cysts in the same patient. J Oral Maxillofac Pathol 2013;17:479.

Source of Support: Nil. Conflict of Interest: None declared.