

Cartilaginous Choristoma of Tonsil: A hidden clinical entity

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INTRODUCTION

Choristoma is a tumor like mass which is an ectopic rest of normal tissue due to embryological developmental defect. It is a developmental anomaly of the second pharyngeal arch and follows a benign course and may occur following recurrent tonsillitis. It was first described by Berry in 1890. The age range varies from 10 to 80 years. Here we report a case of 38 year old female who present at our out-patient department with the history of throat pain for 2-3 months and was clinically diagnosed as recurrent tonsillitis. On histopathological examination, mature hyaline cartilage were found surrounded by lymphoid follicles.

CASE REPORT

A 38 year old female presented at our Otolaryngology out-patient department with the history of throat pain for 2-3 months. Rest of the head and neck examination was normal. A clinical diagnosis of recurrent tonsillitis was made. Tonsillectomy was performed as the symptoms of the patient were persistent despite conservative management. The specimen was sent for histopathological examination. Grossly, two pieces of greyish brown tissue, each measuring

ABSTRACT

Choristoma is a tumor like mass which is an ectopic rest of normal tissue due to embryological developmental defect. The presence of choristoma in tonsil is extremely rare. On histopathological examination, mature hyaline cartilage were found surrounded by lymphoid follicles. We present a case of cartilaginous choristoma with the complaint of recurrent tonsillitis.

KEY WORDS

Cartilaginous choristoma, Tonsil

2.5x2x1 cm were received (Fig. 1). On histopathological examination, tissue was lined by stratified squamous epithelium with an underlying lymphoid tissue showing reactive changes (Fig. 2a, 2b). Also the sub epithelium showed islands of mature hyaline cartilage surrounded by lymphoid follicles (Fig. 3). A diagnosis of cartilaginous choristoma was made.

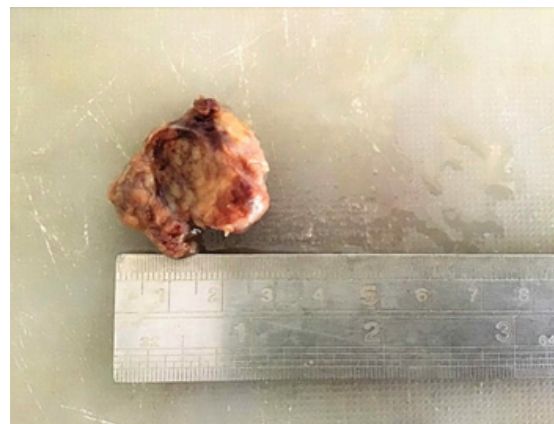


Figure 1. Gross appearance of tonsil showing gray white to gray brown areas with cryptic spaces.

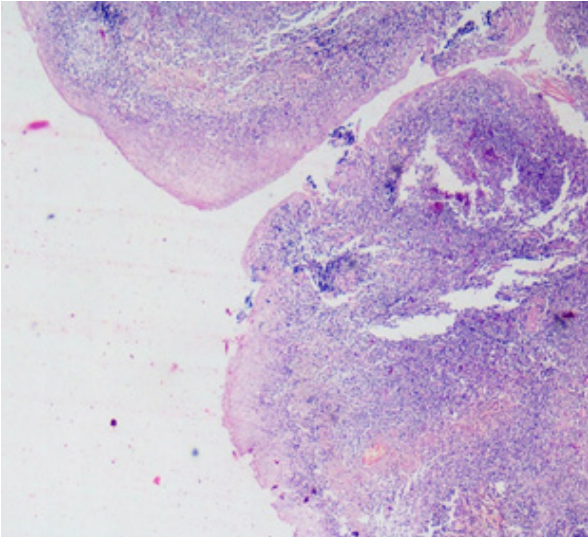


Figure 2a. H&E sections show tissue lined by stratified squamous epithelium with an underlying lymphoid tissue showing reactive changes, 40X

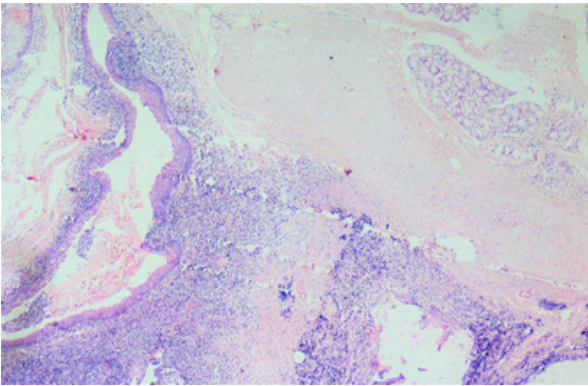


Figure 2b. H&E sections show tissue lined by stratified squamous epithelium with an underlying lymphoid tissue showing reactive changes, 10X

DISCUSSION

Choristoma is a tumor like mass which is an ectopic rest of normal tissue due to embryological developmental defect.¹ It is a developmental anomaly of the second pharyngeal arch and follows a benign course and may occur following recurrent tonsillitis.¹ The surface epithelium and the lining of the tonsillar crypts of the tonsil develop from the endoderm of second pharyngeal pouch.²

Cartilaginous choristoma is a developmental anomaly and is common in the head and neck region and presents as a painless hard nodules. It was first described by Berry in 1890. The age range varies from 10 to 80 years.^{3,4} Haemal et al. suggested differentiation of multi-lineage mesenchymal

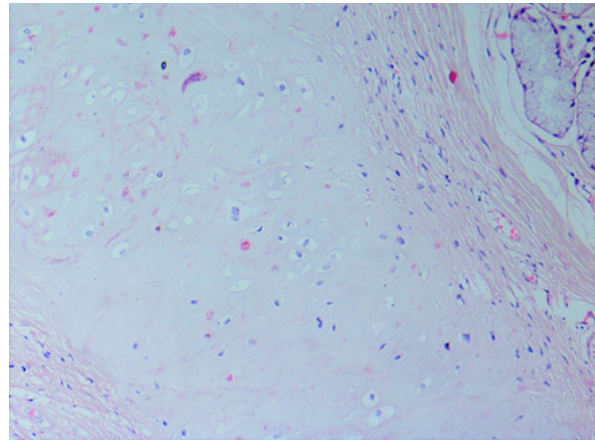


Figure 3. H&E sections show mature cartilage with normal appearing chondrocytes, 40X

progenitor cells, stimulated to grow by trauma, irritation or inflammation and cartilage development from heterotopic fetal cartilaginous remnants could be the reasons of pathogenesis of Choristoma.^{2,4-6} Choristoma can be classified according to their locations as salivary, cartilaginous, osseous, lingual, thyroid, glial or gastric mucosal.⁷

Cartilaginous choristoma of the oral cavity is more frequently seen in the tongue, followed by buccal mucosa and soft palate. They have been reported in several locations as cervix, endometrium, breast tissue, middle ear, pharynx and hypopharynx.^{1,3,8} Erkilic et al. reported 3% incidence of cartilaginous choristoma on tonsillectomy specimens.⁸ Cartilaginous choristoma should be distinguished from cartilaginous metaplasia, which occurs in the soft tissue beneath the ill-fitting dentures. It is histologically characterized by diffuse deposits of calcium and scattered cartilaginous cells arranged in various stages of maturation in single or clustered cartilaginous foci.⁷ Although recurrence in the head and neck regions has not been reported, simple excision of the lesion with the surrounding tissue is the proper treatment. However, in the other regions, the perichondrium should be excised as well, due to potential risk of new cartilage formation and recurrence.^{3,7}

Cartilaginous choristomas are the rare entity in the nasopharynx and of academic interest. It comprises a very small minority of all nasopharyngeal masses. It is expected to follow benign course as normal cartilage found elsewhere in the body. Thus, choristomas is to be suspected when a patient with chronic tonsillitis is being evaluated. When large, they can be clinically confused with true neoplasm.

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