Case Report

DOI: NJLM/2014/7280:2008

Cartilaginous Choristoma of Palatine Tonsil- Rare Entity

Ear, Nose, Throat Section

VIBHUTI D AMBAWADE, SMITA S SONAWANE, HRISHITA V KOTHAVADE, MADHURI S KATE

ABSTRACT

Choristoma is a mass of histologically normal tissue in an abnormal location. It follows a benign course and could be cause of recurrent tonsillitis. Here, we are reporting a case of 5 year old male child who presented with persistent tonsillitis. Histopathology revealed a focus of mature hyaline cartilage surrounded by lymphoid follicles.

Keywords: Choristoma, Cartilage, Tonsil

CASE REPORT

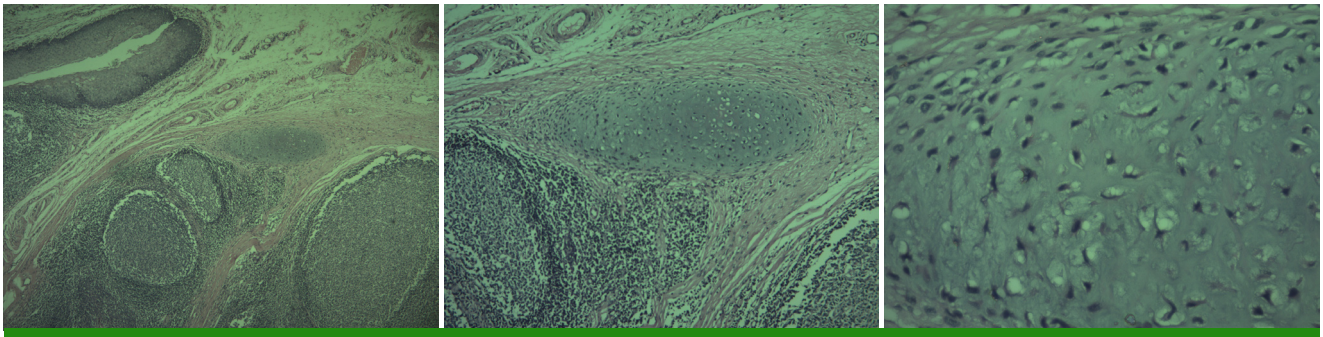
A 5-year-old child presented to ENT OPD with the complaints of difficulty in swallowing, snoring and halitosis with on and off fever of 7 months duration. The local oral examination revealed bilateral enlarged tonsils which was covered with specks of whitish exudate . There was no history of otological signs and symptoms. A clinical diagnosis of tonsillitis was made and bilateral tonsillectomy was performed. Grossly the excised tissues are grey brown, firm and received in pieces. Each piece measures 1x1.5x1cm. Cut surface is smooth and grey brown in colour with one small 0.2 cm glistening area. On histopathological examinations sections from tonsillar tissue were found to be covered by stratified squamous epithelium with features of chronic tonsillitis and the intervening crypts showed keratinous flecks [Table/Fig-1,2]. There was single island of mature hyaline cartilage which was surrounded by lymphoid follicles [Table/Fig-3].

DISCUSSION

A choristoma is an aggregate of microscopically normal cells or tissues which occurs in aberrant locations. Choristoma in head and neck region was reported in the pharynx, hypopharynx, oral mucosa and middle ear [1, 2].

Choristomas can be classified according to their locations as salivary gland, cartilaginous, osseous, lingual, thyroid, glial or gastric mucosal.

Cartilaginous choristoma was first described by Berry in 1890 [3]. In addition to bone and cartilage, choristoma of glial cells and choroids plexus have been reported by Nausheen et al., [4]. The choristoma of head and neck region is a rare lesion and cartilaginous choristoma within the tonsil has been reported [3,5]. One series identified 20 such cases. Seven of which involved the tongue with other less common sites including the buccal mucosa and the soft palate [3]. Cartilaginous



[Table/Fig-1]: Tonsillar tissue showing reactive lymphoid hyperplasia and cartilagenous tissue nest.(40x)
[Table/Fig-2]: Well-defined cartilagenous nest embedded within tonsillar tissue.(100x) **[Table/Fig-3]:** Section shows chondrocytes of formed mature hyaline cartilage arranged in clusters and surrounded by amorphous cartilagenous matrix.(400x)

choristoma is more commonly found on the dorsum of tongue but four cases have been found on ventral aspect which had predilection for female sex. Choristoma of palatine tonsil do not have sex predilection [6].

Cartilaginous choristoma should be distinguished from cartilaginous metaplasia which usually occurs in the soft tissue beneath the ill fitting dentures. Cartilaginous metaplasia is histologically characterized by the diffuse deposits of calcium and scattered cartilaginous cell arranged in various stages of maturation in single or clustered cartilaginous foci. In our case, a focus of mature cartilage is seen without calcification. Mature cartilage is not normal constituent of nasopharyngeal epithelium and therefore by definition the lesion in this case represents a choristoma. The age of diagnosis for these patients varied greatly ranging from 10-80 years but our patient is 5 year old male child. Several theories exist as to the cause of these lesions including cartilaginous development from heterotropic fetal cartilaginous remnants and development from pluripotent mesenchymal cells stimulated to grow by trauma, irritation or inflammation or it may be developmental anomaly in the second pharyngeal arch [7].

Although recurrence has not been documented in the head and neck region, some extra oral cases have been reported to be recurrent. So all perichondrium should be removed because it may have potential to develop new cartilage [8]. Complete surgical excision is the preferred mode of treatment.

CONCLUSION

To conclude, cartilaginous choristomas are rare entity in the nasopharynx and comprises of very small minority of all nasopharyngeal masses. However, it is expected to follow benign course as normal cartilage found elsewhere in the body.

REFERENCES

[1] Bernig T, Weigel S, Mukodzi S, Beck JF, Wiersbitzky H, Von Suchodoletz H, et al. Ectopic cervical thymus in a 12-year-old boy:a case report. *Pediatr Hematol Oncol.* 2000;17(8):713-17.

[2] Haemel A, Gnepp DR, Carlsten J, Robinson-Bostom L. Heterotopic salivary gland tissue in the neck. *J Am Acad Dermatol.* 2008;58(2):251-56.

[3] Bhargava D, Raman R, KhalfanAl Arbi R, Bushnurmath B. Heterotopia of the tonsil. *J Laryngol Otol.* 1996;110(6):611-12.

[4] Yaqoob N, Ahmed Z, Hussain A. Heterotopic Glial tissue in Tonsil: a case report. *JPMA.* 2005;55:507-08.

[5] Kapoor N Bhalla J, Bharadwaj VK, Ktgiwar BK. Cartilaginous choriostoma of palatine tonsil-a case report. *Indian J Pathol & Microbiol.* 2003;4:654-55.

[6] Majeed A.A.A, Farah CS. Mixed choriostoma on the anterior dorsal tongue: a new case and review of literature. *Oral surgery.* 2011;4:26-29.

[7] Cutright DE. Osseous and chondromatous metaplasia caused by dentures. *Oral Surg Oral Med Oral Pathol.* 1972; 34 (4) : 625-33.

[8] Ashraf MJ, Azapira N, Gandomi M. Cartilaginous choriostoma in palatine tonsil. *IRCMJ.* 2010;12:65-67.

AUTHOR(S):

1. Dr. Vibhuti D Ambawade
2. Dr. Smita S Sonawane
3. Dr. Hrishita V Kothavade
4. Dr. Madhuri S Kate

PARTICULARS OF CONTRIBUTORS:

1. Associate Professor, Department of Pathology, ESI-PGIMSR and Model Hospital, Andheri (East), Mumbai, India.
2. Senior Resident, Department of Pathology, ESI-PGIMSR and Model Hospital, Andheri (East), Mumbai, India.
3. Junior Resident, Department of Pathology, ESI-PGIMSR and Model Hospital, Andheri (East), Mumbai, India.
4. Head of Department, Department of Pathology, ESI-PGIMSR and Model Hospital, Andheri (East), Mumbai, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Hrishita V Kothavade,
Junior Resident, Department of Pathology, ESI-PGIMSR and Model Hospital, Andheri (East), Mumbai, India.
Email: vikas.kothavade@gmail.com
Ph: 8691025087

FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Publishing: **Jun 30, 2014**