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A Rare Case of Unilateral Lymphoid Papillary Hyperplasia

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Abstract

Lymphoid papillary hyperplasia (LPH) is a rare abnormality of the Tonsils with clinical features similar to both benign and malignant tumors. LPH has been most frequently reported in the Japanese population and it is uncommon in the Indian population. Herein, we are reporting a case of a 58-year-old Indian male who had a tonsillectomy for tonsillar growth. Histopathological examination of the specimen revealed polypoidal tissue covered by stratified squamous epithelium, and the sub-epithelial tissue core showed reactive lymphoid follicles with a germinal center. The histomorphology was indicative of lymphoid papillary hyperplasia of the tonsil. The etiology of LPH is not known due to the limited number of reported cases. LPH is a benign lesion of the tonsil which can be easily cured by tonsillectomy.

Keywords: *Tonsils, lymphoid papillary hyperplasia, papillomatous, papillary.*

Introduction

Tonsils are known to be the centers of acute and chronic inflammation; tonsillitis is the most common lesion. Neoplasms that occur in the tonsils are mostly malignant, tumor-like lesions, and benign tumors are less common (1). Herein, we are discussing a rare disorder of the tonsils Lymphoid papillary hyperplasia (LPH) which has been most frequently reported in the Japanese population (1). LPH is a rare benign lesion of the palatine that is characterized by papillomatous, papillary, or multiple polypoid gross appearances with reactive follicular hyperplasia covered by a non-typical squamous epithelium (2). In our case, only the right tonsillar region was affected, and it appeared to be papillary. This disorder has not been well reported and documented among the Indian population. Herein we report a case of this rare abnormality.

Case Report

A 58-year-old Indian male was referred to the ENT department of our hospital with a complaint of right tonsillar swelling and grating sensation while swallowing for 4 months. The patient had no other symptoms such as dysphagia, fever, cough, dyspnea, or hemoptysis. The patient is a known case of diabetes, hypertension, and hyperlipidemia for three years. Physical examination showed papillomatous growth in the right tonsillar region. The patient's left lateral tonsillar region was intact.

A pedicle excisional biopsy of the growth was performed, and the sample was sent for histopathological examination.

Grossly, the biopsy consisted of a single grey-white soft tissue fragment with papillary projection measuring 0.4x0.2x0.1 cm. The cut surface showed grey-white to grey-brown tissue. All the tissue was submitted in one cassette. The specimen was fixed with neutral formalin and then embedded in paraffin wax for routine histopathological examination. The microscopic examination revealed polypoidal tissue covered by stratified squamous epithelium, and the sub-epithelial tissue core showed reactive lymphoid follicles with a germinal center. Occasional crypt filled with keratin and bacterial colonies was seen. There was no dysplasia or evidence of malignancy. The histomorphology was indicative of lymphoid papillary hyperplasia of the tonsil.

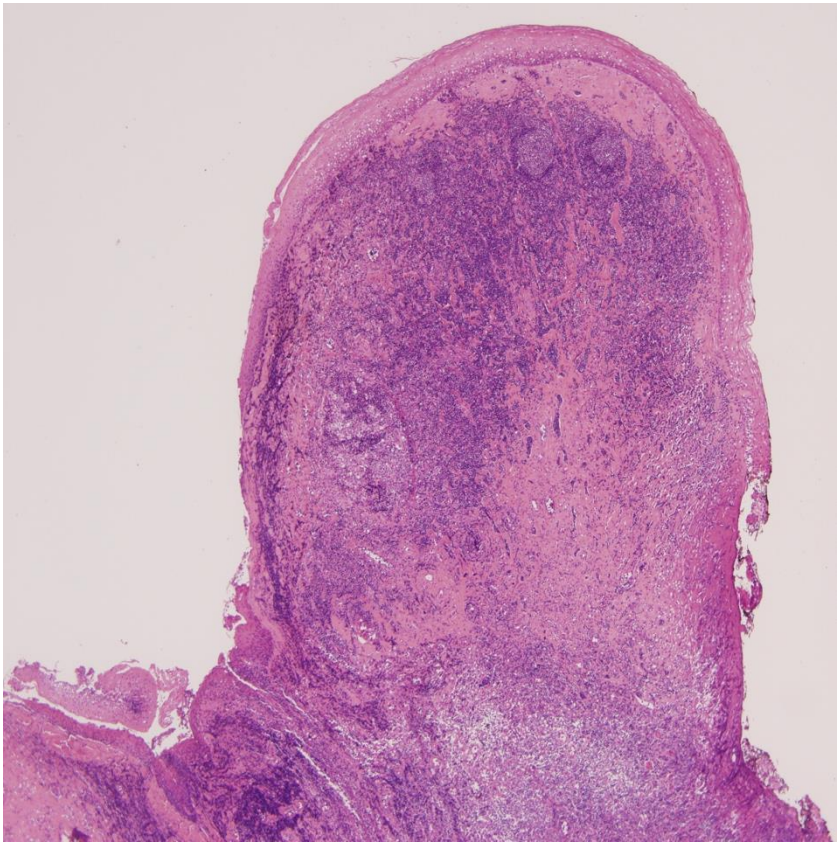

Figure 1. (H&EX40) Polypoidal architecture of Lymphoid papillary hyperplasia

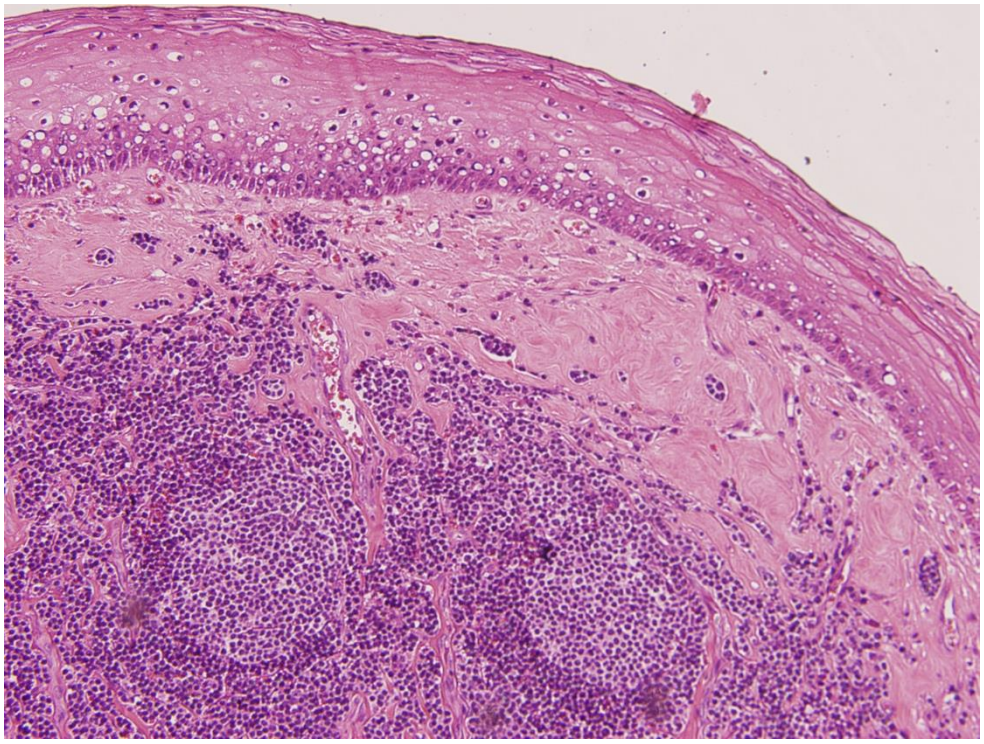

Figure 2 (H&Ex100) Benign stratified squamous epithelia with subepithelial reactive lymphoid follicles.

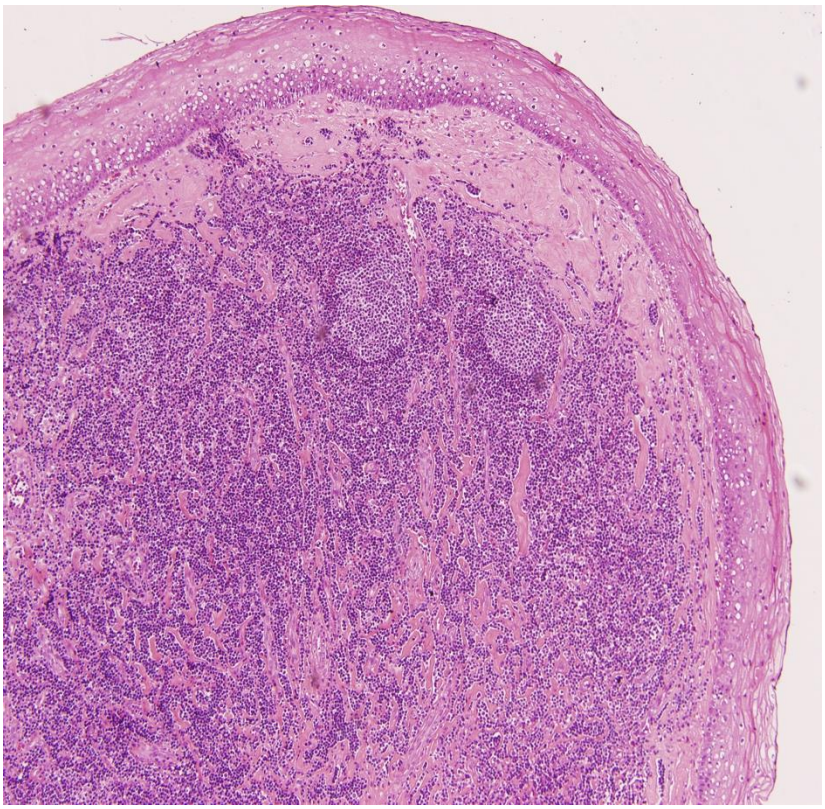

Figure 3 (H&EX200) Benign stratified squamous epithelia with subepithelial reactive lymphoid follicles

Discussion

Lymphoid papillary hyperplasia is a rare disorder of the tonsils with clinical features similar to oral squamous papilloma and lymphoid polyposis. This disorder is mostly reported in the Japanese population however, the number of cases that have been reported in Japan is small (3). To this date, the number of reported cases in Japan is 58 and the total number of cases among the non-Japanese population is 12 including our case. Moreover, a manifestation of LPH is common in Caucasian people (8). This is the second case reported in the Indian population, Singh et al. (1) reported the first case of LPH in the Indian population. The patient was a four-and-a-half-year male examined with a left-sided papilloma-like lesion arising from the left lateral tonsil (4). The patient was presented to the ENT department with left-sided swelling inside the mouth with no other symptoms. In our case, the patient is a 58-year-old Indian male with a papillomatous growth in the right tonsillar region and he was presented to the ENT department of our hospital with a complaint of right tonsillar swelling and grating sensation while swallowing for 4 months. The sex distribution of previously reported cases of LPH revealed that this disorder is more common in females, the number of reported cases in females is 44 compared to males 26 cases including our case. The age distribution of previously reported cases ranged from 2 to 54 years with a mean age of 16.2 years. 71% of the patients were considered adolescents and pediatrics (3). LPH is a benign lesion of the palatine tonsils which is characterized by several papillary structures found on the surface of the tonsils which mimic both benign and malignant lesions. The majority of reported LPH cases were presented with bilateral involvement of the tonsils like the case presented by Altun et al (4). However, in our case, the patient presented with a unilaterally affected tonsil. Similar to our case Singh et al, Zhao et al, and Yorita et al., described patients with unilateral palatine-affected tonsils (1)(5)(2).

Grossly, the biopsy consisted of a single grey-white soft tissue fragment with papillary projection. Microscopic examination showed polypoidal tissue covered by stratified squamous epithelium, and the sub-epithelial tissue core showed reactive lymphoid follicles with a germinal center. Zvrko et al. (3) reported an LPH case of a 35-year-old male with hypertrophied right palatine tonsil covered by several papillary structures of various sizes. Macroscopically, the right palatine tonsil was grey and white, and the surface was covered by numerous various-sized small papilliform projections. Microscopic examination revealed finger-like papillary projections with reactive lymphoid follicles surrounded by stratified squamous epithelium. Microscopic examination of LPH shows lymphoid follicle hyperplasia and excessive increase of the germinal center therefore, LPH can be easily distinguished from other neoplastic lesions, and it can be easily identified as a benign tumor-like lesion. A tonsillar lymphangiomatous polyp is a non-neoplastic lesion that mimics LPH (6). Histological

examination of tonsillar lymphangiomatous polyp reveals submucosal proliferation of the lymphovascular channels covered by endothelium surrounded by a lymphoid, fibrous, or adipose stroma. It is easily differentiated from LPH because it lacks the prominent lymphoid follicle hyperplasia which is the main feature of LPH. The etiology of LPH is unknown because of the small number of cases however, Dias et al (9) suggested several causative factors which might contribute to the pathogenesis of LPH such as hormonal influence, neoplasia, congenital deformity with autosomal dominant inheritance and repeated inflammatory stimulation. LPH may result from of excessive and repeated antigenic stimulation of the tonsils. Immunological response mediated by T-lymphocytes may have a role in this process however, until now the specific regulatory mechanism is not clear (9). The gold standard treatment for LPH is a simple surgical excision and pathological examination. During the follow-up period, there was no tonsillar abnormality and to this date, there is no recurrence of the disease.

Conclusion

Lymphoid papillary hyperplasia is a rare abnormality of the palatine tonsil with a papillary appearance. LPH is a benign lesion of the palatine tonsils, and it is mostly reported in the Asian population. The etiology of this uncommon disorder is still unclear due to the limited number of cases. LPH is benign and it can be easily differentiated from other lesions by histological examination, and it can be effectively cured by tonsillectomy (7). There is no reported recurrence of LPH in any patient.

References

1. Singh S, Sucheta, Kohli R et al. Lymphoid papillary hyperplasia of tonsil: a rare case report. Int J Health Sci Res. 2015; 5(12):444-446.

2. Yorita K, Nakagawa H, Miyazaki K, Ishitani Y, Arisawa Y. Lymphoid papillary hyperplasia arising from the upper portion of the left Palatine Tonsil: A case report and literature review. Indian Journal of Otolaryngology and Head & Neck Surgery. 2019;71(S1):835–8.

3. Zvrko E, Vuckovic L. A rare benign disorder of the palatine tonsils: Case report and review of the literature. International Journal of Medical Reviews and Case Reports. 2022;6(4):66–68.

4. Altun D, Arslan HH, Umudum H, Okur G, Ersal Y. Lymphoid papillary hyperplasia of Palatine tonsils: A rare pediatric case from Turkey. International Journal of Pediatric Otorhinolaryngology Extra. 2015;10(2):25–7.

5. Zhao M, Yu J, Li C. Lymphoid papillary hyperplasia of the palatine tonsil: a Chinese case report. Int J Clin Exp Pathol. 2013;6(9):1957–1960.

6. Kardon DE, Wenig BM, Heffner DK, R. Thompson LD. Tonsillar Lymphangiomatous Polyps: A Clinicopathologic Series of 26 Cases. Modern Pathology 2000;13(10):1128–1133.

7. Carrillo-Farga J, Abbud-Neme F, Deutsch E. Lymphoid papillary hyperplasia of the Palatine tonsils. The American Journal of Surgical Pathology. 1983;7(6):579–82.

8. Borromini A, Marchesi A, Golinelli G. Unusual papillary lymphoid hyperplasia of the palatine tonsil associated with Ebstein Barr virus infection in a child: A case report. Journal of Pediatric Care. 2016;02(03).

9. Dias EP, Alfaro SE, De Piro SC. Lymphoid papillary hyperplasia: report of a case. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2003 Jan;95(1):77-9.