

Case Report

Lymphoid Papillary Hyperplasia of Tonsil: A Rare Case Report

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ABSTRACT

Lymphoid papillary hyperplasia of tonsil is a rare entity with a clinical impression of both a benign and a malignant tumor. We are reporting a case of four and a half years old Indian male child who underwent tonsillectomy for left sided tonsillar growth. Histopathologic study of the specimen showed a distinct form of lymphoid hyperplasia with finger-like projections that composed of remarkable follicular lymphoid hyperplasia. The case was diagnosed as lymphoid papillary hyperplasia. We could not find any such previous Indian case in the most recent literature so far. Recognition of this rare pathology is important because in spite of the clinical features suggestive of both a benign and a malignant tumor; this process is essentially a benign tumor-like proliferation that can be easily cured by tonsillectomy.

Keywords: Tonsils, lymphoid papillary hyperplasia, papilloma.

INTRODUCTION

Tonsils are mostly the centers for acute and chronic inflammations, out of which chronic tonsillitis is the commonest lesion. Most neoplasms occurring in the tonsils are malignant; benign tumors or tumor-like lesions are less common. Squamous papillomas are the most common among benign disorders. Lymphoid papillary hyperplasia is a rare pathology of the tonsils and has been reported most frequently in the Japanese populations, ^[1] sporadically in the western literature. ^[2,3] However, this abnormality has not been well documented among the Indian population. Herein, we report an Indian case of this rare condition.

CASE REPORT

A four and a half years old Indian male presented to the ENT department of our hospital with a complaint of left sided swelling inside mouth. The child had no other symptoms such as fever, cough and expectoration, hemoptysis or dyspnea. Physical examination showed a left sided papilloma-like lesion arising from left lateral tonsil. Patient's right lateral tonsil was normal. His past medical history was unremarkable, and his pedigree members denied any family medical history. The clinical impression was suggestive of considering a neoplastic lesion such as mucosal papilloma. Excisional biopsy was performed. Specimen was fixed in neutral buffered formalin and then embedded in paraffin for routine histopathologic examination.

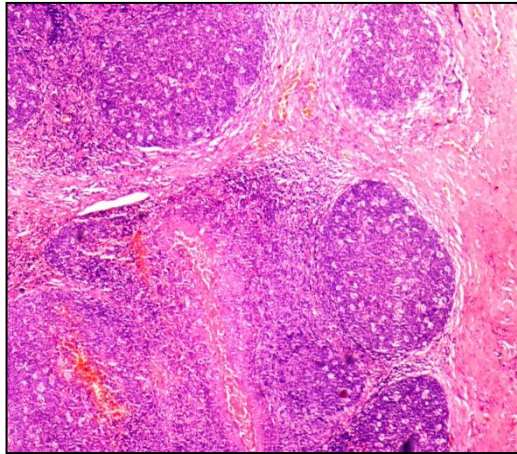


Fig 1a. 40x

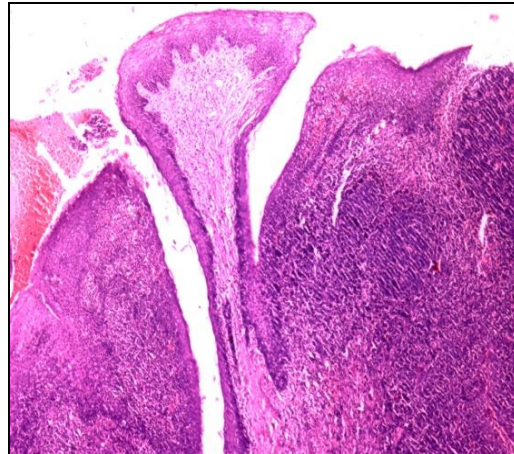


Fig 1b. 40x

Fig 1a & 1b show follicular hyperplasia and increased germinal centers covered by stratified squamous papillary projections

Grossly, the biopsy consisted of light brown coloured nodular soft tissue measuring 3x2x1 cms. Finger like projections were seen on the external surface. Histopathological examination of the biopsy revealed papillary projections covered by stratified squamous epithelium on the surface. The papillae consisted of lymphoid tissue with marked follicular hyperplasia along with excessive increase of the germinal center and decrease of the follicular cortex. Fibrous septae were seen in between the follicles (Fig. 1a). The covering squamous epithelium showed mild hyperplasia with parakeratosis and hyperkeratosis (Fig. 1b). No evidence of malignancy was detected. The histomorphology was suggestive of a diagnosis of lymphoid papillary hyperplasia of the tonsil.

DISCUSSION

Lymphoid papillary hyperplasia is a rare pathology of the tonsils. Clinically it mimics both a benign and a malignant tumor, [1-3] such as oral squamous papilloma and lymphoid polyposis, both of which can lead to severe pharyngeal obstruction. Microscopically, it reveals lymphoid tissue rich benign tumor-like lesion and can easily be distinguished from

other neoplastic lesions. One more rare non-neoplastic lesion that mimics lymphoid papillary hyperplasia is tonsillar lymphangiomatous polyp. [4] However, tonsillar lymphangiomatous polyp histologically shows characteristic submucosal proliferation of lymphovascular channels lined by endothelium among a fibrous, lymphoid, or adipose stroma and lacks the prominent lymphoid follicles hyperplasia which is characteristic of lymphoid papillary hyperplasia.

The age and sex distribution of previously reported cases revealed that this condition affects mostly females, with an age range of 2 to 54 years. [3] Symptoms of obstruction are more common in childhood because of the small size of the nasopharynx. [3] However it may also affect adults owing to local dysfunction of the epithelial structures. [5] Most reported lymphoid papillary hyperplasia presented with involvement of bilateral tonsils like the one described by Demet et al. [6] However, our patient presented with unilateral affected tonsil. Ming et al has also described a case of unilateral involvement. [7]

The etiology of lymphoid papillary hyperplasia is not clearly known. [3] Some of the causative factors, as suggested by Dias et al in 2003, include repeated inflammatory stimulation, hormonal influence, neoplasia, and congenital

deformity with autosomal dominant inheritance. [3] However our patient denied any family medical history. It was not possible to determine whether any abnormal hormonal stimulus or any repeated inflammatory process potentially contributed to this lesion in our case. Lymphoid papillary hyperplasia may be the result of excessively persistent antigenic stimulation of the tonsils. T-lymphocyte mediated immunological response may have a role in this process. [3] However, the exact regulatory mechanism is not entirely known.

CONCLUSION

Lymphoid papillary hyperplasia is a rare abnormality of the tonsils with a predilection for affecting young Asian girls, the pathogenesis of which is not certain. The significance of recognizing this pathology lies in its clinical appearance. In spite of the clinical characteristics mimicking a diagnosis of epithelial papillomas or even a malignancy, the process is benign; probably non-neoplastic that can readily be differentiated from other lesions by histologic examination and can be easily cured by tonsillectomy.

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