

A pedunculated Lymphangiomaticous polyp of the palatine tonsil

Medical Science

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ABSTRACT

Tonsillar lymphangiomaticous polyp is a relatively rare clinical finding. We report a case of 19 year old male who presented with a unilateral mass of the palatine tonsil and difficulty in swallowing. Local examination revealed a right sided polypoid mass projecting into the oropharynx. The patient was managed with right tonsillectomy. Histopathological finding revealed a benign lymphangiomaticous polyp of the palatine tonsil.

KEYWORDS:

Tonsillar polyp, Lymphangiomaticous polyp

Introduction

Polyps in the palatine tonsil are an uncommon finding and a very few cases are reported in the literature. Palatine tonsils are generally pedunculated and often found extending towards the oropharynx. Patients usually presents with foreign body sensation in the throat and difficulty in swallowing. Tonsillar lymphangiomaticous polyp is a hamartomatous lesion and is described histologically as lymphangiectatic fibrous polyp, polypoid lymphangioma of the tonsil, hamartomatous tonsillar polyp, etc. In this paper we report our experience of a benign lymphangiomaticous polyp of the palatine tonsil.

Case Report

A 19 year old male presented to the outpatient department with complaints of foreign body sensation in throat since six months followed by dysphagia. He was otherwise asymptomatic. Local physical examination revealed a smooth, pedunculated, greyish white polyp extending from the right palatine tonsil into the oropharyngeal lumen. There was no cervical lymphadenopathy and rest of the nasoro-pharynx was normal on inspection. Pre-operative routine investigations were within normal limits. The patient underwent an uneventful right tonsillectomy under general anesthesia. The tonsil was removed using dissection method and bipolar cautery. The specimen was received in the histopathology laboratory for examination. Grossly the polyp measured 2.5×1×1 cm and was attached to the tonsil with a stalk (Fig. 1a).

Cut surface of the polyp showed yellow tan areas (Fig. 1b). Histologically, it was lined by stratified squamous epithelium, underlying tissue showed numerous lymphatic channels & lymphoid follicles Fig 2(a). The lymphoid follicles were hyperplastic Fig 2(b). The lymphatic channels are of variable sizes, which are lined by endothelium and filled by pink homogenous lymph Fig 2(c).

Discussion

Lymphangiomaticous polyps of the tonsil are rare benign hamartomatous lesions that present as masses. A polypoid growth in the oropharynx especially in the palatine region could be a source of anxiety for the patient due to foreign body sensation, difficulty in swallowing etc and are of diagnostic dilemma for the otolaryngologist^[1,2]. Most of the lymphangiomaticous polyps arise from the medial surface of the palatine tonsil and are pedunculated.^[2] Kardon et al and Barretto et al reported the median age of presentation as 25.2 years and 29 years respectively^[2,3]. Males and females are equally involved. The common clinical symptoms are foreign body sensation in throat, irritation, dysphagia and odynophagia. The present case was a 19 year old male presented with foreign body sensation and dysphagia of 6 months duration. He was younger for the age reported in literature.

Benign tumors or tumor-like lesions of the palatine tonsil are less common than malignant ones. Squamous papilloma accounts for the majority of the benign lesions, whereas vascular tumors are rarely reported. The tonsil is a less common site for the development of

lymphangiomaticous lesions.

Definitive diagnosis can be ascertained by the histological examination. Histologically, they are covered with squamous epithelium and the stroma consists of varying amounts of fibrous, lymphoid, collagen and adipose tissues.^[2,4] The polyp in the present case was lined by stratified squamous epithelium; underlying tissue showed lymphatic channels of variable sizes lined by endothelium and were filled by pink homogenous lymph. Lymphoid follicles were also seen in the subepidermal zone. Earlier similar findings were reported by Heffner et al, he reviewed the pathology of lymphangiomaticous polyps which displayed a wide spectrum of histological features, including varying amounts of fibrous and lymphoid tissues^[5].

Juvenile angiofibroma, fibroepithelial polyps, papilloma, and lymphangioma are common differential diagnosis of lymphangiomaticous polyp. But clinically, angiofibromas occur in the nasopharynx, often attaining a large size, with extensive growth and even bone erosion, and present with epistaxis due to the rich blood supply. Although cases of LAP occurring in the nasopharynx have been reported but there is no invasion into the surrounding structures. On histological examination, the stroma of angiofibromas is more cellular, composed of stellate and plump cells, and contains staghorn-like thin walled vascular channels. On the other hand LAPs usually have relatively paucicellular fibrous background and many more lymphocytes. Squamous papilloma is usually an exophytic surface epithelial proliferation, arranged in multiple layers, not invading the underlying stroma, and lacks a lymphatic and lymphocytic component. When lymphangiomas are described, they usually contain widely dilated vascular channels with luminal proteinaceous fluid and lymphocytes. Cases of LAP contain dense fibrous connective tissue to a variable degree, a rich lymphocyte investment, and adipocytes.^[2]

The immunoprofiles of these lesions in a large series revealed dilated lymphatic vessels, which contained at least a thin wall of smooth muscle, and they were uniformly reactive for the factor VIII-related antigens, CD31 and CD34. Nevertheless, immunohistochemistry is not needed for definitive diagnosis^[12]. Immunohistochemistry was not performed in our patient.

Lymphangiomaticous polyps of the palatine tonsils are benign lesion treated with surgical excision. After surgical excision, there has been no incidence of recurrence or malignant transformation reported in the medical literature. No evidence of recurrence was noted in the present case even after one year of follow-up.

Conclusion

Lymphangiomaticous polyp of the palatine tonsils are a benign polyps uncommonly found in clinical practice, though its true incidence seems to be under reported due to varied nomenclature. Surgical management is curative and no recurrence and malignant transformations have been reported in the literature.

Fig 1(a-b):Gross specimen (a) Polyp attached to the tonsil with a stalk. (b)Cut surface shows yellow tan areas.

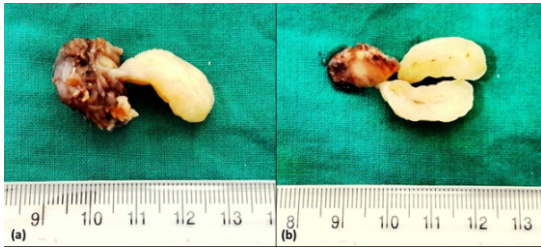
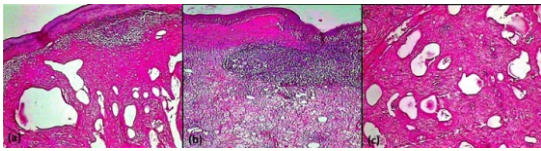


Fig 2(a-c): Histopathology (a) Lined by stratified squamous epithelium, underlying tissue shows lymphatic channels & lymphoid follicles(H: E X 40). (b) Hyperplastic lymphoid follicles (H: E X 40). (c) lymphatic channels of variable sizes, which are lined by endothelium and filled by pink homogenous lymph (H: E X 40).



References

1. Harrison GI, Johnson LA. Lymphangioma of the tonsil: report of a case with a critical review. *The Annals of Otolaryngology, Rhinology, and Laryngology*. 1960; 69:961–968.
2. Kardon DE, Wenig BM, Thompson LD. Tonsillar lymphangiomas: a clinicopathologic series of 26 cases. *Modern Pathology*. 2000;13(10):1128–1133.
3. Barreto I, Juliano P, Chagas C et al. Lymphoid polyps of the palatine tonsil. *Int J Surg Pathol*. 2007;15(2):155-9.
4. Ryu HS, Jung SY, Koh JS et al. Tonsillar lymphangioma: Report Two Cases. *Korean J Pathol*. 2006;40:381-4.
5. Heffner DK. Pathology of the tonsils and adenoids. *Otolaryngol Clin North Am*. 1987;20:279-286.
6. Barreto I, Costa AF, Martins MT et al. Immunohistochemical study of stromal and vascular components of tonsillar polyps: High endothelial venules as participants of the polyp's lymphoid tissue. *Virchows Arch*. 2011;459(1):65-71.