A Pedunculated Hamartomatous Polyp of the Palatine Tonsil

Raphael Hart Lyngdoh, Sumanth Devaraju, Leena JB

Department of Pathology, Father Muller’s Medical College, Mangalore, India

ABSTRACT
Hamartomatous polyps of the palatine tonsil are very rare. They have been variously termed as a lymphangiectatic fibrous polyp, lipoma, pedunculated tonsil etc. in the English literature. We present here a case of hamartomatous polyp of the tonsil occurring in a 32-year-old male who presented with bilateral enlarged palatine tonsils with recurrent tonsillitis. Surgical excision showed two pale brown nodular tissue bits, larger measuring 4×3×1 cm and smaller measuring 3.5×2.5×1.5 cm. An irregular pedunculated polypoidal tissue measuring 1.5×1×0.8 cm was seen attached to the smaller mass, the cut surface of which showed pale white, lobulated areas. On histological examination, the polyp showed lining by stratified squamous epithelium and was composed of fibrocollagenous stroma with many dilated blood vessels, adipocytes, subepithelial lymphoid aggregates and benign mucinous glands suggestive of a hamartomatous polyp. Both tonsils showed features of chronic tonsillitis.

Keywords: Palatine Tonsil, Polyp, Hamartoma

Introduction
Hamartomatous polyps of the palatine tonsil are relatively rare. The literature survey showed few case reports of this lesion but with various terminologies viz., lymphangiectatic fibrous polyp, hamartomatous tonsillar polyp, lipoma, pedunculated hamartomatous polyp and others (1-6). The varying terminologies used and its rare occurrence has made it difficult to assess accurately the true incidence and hitherto largest series being of 26 cases over a period of 20 years(7). These patients present with acute tonsillitis, recurrent sore throat, blood in sputum, dysphagia, mass in the throat, slowing deglutition and lump in the throat (7). Some of the cases of pedunculated tonsillar polyps are reported as a benign neoplasm like a lipoma, pedunculated lipoma etc.
This study presents a case of hamartomatous polyp to stress on the benign nature of this rare lesion, clinically diagnosed as neoplasm. We want to emphasize the hamartomatous nature of this lesion with review of literature.

**Case report**

A 32-year-old man had right tonsillar swelling for 3 years, which was untreated, followed by sneezing and dysphagia. Clinical examination revealed enlarged tonsils with a pedunculated polyp arising from the left tonsil. Systemic examination did not reveal any abnormality. His routine blood examination for complete blood count, blood sugar level, renal function tests and liver function tests were within normal limits. His routine urine test and plain X-ray chest were normal. He was advised bilateral tonsillectomy along with polypectomy. Surgically removed specimen of both tonsillar tissues including the polyp, were sent for histopathological examination.

On gross examination, the right tonsil was pale brown, nodular and measured $4 \times 3 \times 1$ cms. The left tonsil along with the polyp was found to measure $3.5 \times 2.5 \times 1.5$ cm. The pedunculated polyp attached to it measured $1.5 \times 1 \times 0.8$ cm which on cut surface was yellowish white in colour and showed lobulations.

Histological examination of both the tonsils and the polyp showed mucosal lining of stratified squamous epithelium. Both the tonsils showed follicular lymphoid hyperplasia consistent with chronic tonsillitis.

The polyp was composed of fibrocollagenous and fibrofatty tissue with many dilated blood vessels, lymphatic channels and scanty mononuclear inflammatory cell aggregates (Fig. 1). Based on these features, a diagnosis of hamartomatous polyp was made.

**Discussion**

The term hamartoma is derived from a Greek word, ‘hamartion’ which means a bodily defect. Although a hamartoma is not a tumour, malignant changes can develop. They may occur in any organ, but most often in the spleen, liver and lungs. Hamartomas are very rare in the head and neck region, especially in the pharynx (2). Polypoidal lesions of the tonsil, although reported using various types of nomenclature, are relatively rare lesions. In the literature, descriptions of this lesion as fibrous, lipomatous and lymphangiectatic are found (1, 4). However the tissue components in such lesions, viz. the blood vessels, lymph vessels, and loose fibrous tissue as well as lymphoid cell aggregation are similar to those in normal tonsil. These, along with adipocytes made us consider a hamartomatous nature of the polyp which has also been suggested in the literature (2, 3). The lesion was polypoidal in our case, whereas sessile lesions are described in literature. The majority of lesion in the largest study by Kardon et al. (7), and other case reports (1-5, 8) were also polyps. The histology showed fibrocollagenous and fibrofatty tissue with
many dilated blood vessels, lymphatic channels and scanty mononuclear inflammatory cell aggregates similar to observations of Kardon et al. Terms previously used in the literature such as polyploid lipoma and tonsillar lipoma all depend on the lipomatous components detected in this type of lesion (4, 9), but our lesion had only interspersed fatty tissue with predominance of lymphatic vessels. Terms such as lymphangioma, and lymphangiomatous polyp have also been used for these lesions (2, 7). Most of the patients with polypoidal lesion of the tonsil presented with chronic irritation, bouts of cough, vomiting, tonsillitis and dysphasia as in our case. Barreto et al. did a study on immunohistochemistry of stromal and vascular components of 14 tonsillar polyps and 26 control tonsils. They used CD 34 as marker for blood vessels and high endothelial venules (HEVs), MECA-79 for HEVs, D2-40 for lymphatic vessels, Ki 67, collagens I and III, fibronectin and tenascin-C. The polyps showed increased total lymphatic area, whereas the number of blood vessels and lymphatics and the blood vascular area did not differ significantly from those of control tonsils. Polyps also showed Ki 67 positive endothelial cells and HEVs amid lymphoid tissue and the amount of the latter correlated positively with HEV density. There were lesser amounts of fibronectin, collagens I and III in polyps than in normal tonsils. They concluded that the tonsillar polyps were composed of disorganized connective tissue and lymphatic channels which can be considered hamartomatous proliferations. However, they believe that the lymphoid component in the polyp is possibly reactive due to its relationship with the HEVs. However, they believe that the highly differentiated phenotype of the HEVs and their complex biology are not in agreement with what would be expected for a component of hamartomatous nature (10). In conclusion, we have reported a polypoidal lesion found in the left tonsil and given the term hamartomatous polyp, indicating its non-neoplastic nature.

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References