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Lymphangiomatous Polyp of Tonsil – A Rare Case Report

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Abstract: Lymphangiomatous polyp of palatine tonsil is a very unusual lesion found in the head and neck region. Lymphangiomatous polyps are non neoplastic developmental lesions composed of tissue elements native to the nasopharynx and categorized as a hamartoma. They most frequently present as mass lesions and can be cured by simple surgical excision. We report a rare case of 10 days old male child with unilateral lymphangiomtous polyp of palatine tonsil.
Keywords: Lymphangiomatous polyp, tonsil, hamartoma.

INTRODUCTION

Lymphangiomatous polyps are non neoplastic developmental lesions composed of tissue elements native to the nasopharynx and categorized as a hamartoma. These polyps are considered uncommon. Lesions occur over a wide age range from the first decade to the seventh decade of life, equal sex predilection. The clinical presentation includes dysphagia, sore throat and the sensation of a mass lesion in the throat. The majority of these lesions are polypoid or pedunculated, some are sessile. The polyps are covered by squamous or respiratory epithelium, beneath which is a submucosal proliferation of dilated lymphatic vascular channels and varying amount of fibrous connective tissue. Mature adipose tissue may be present. Some lesions are predominantly papillary with a lymphoid and edematous stroma [1]. Because of the unusual clinical and pathological features of these polyps, pathologist and clinicians alike may have difficulty in classifying them correctly [2]. We describe a rare case of lymphangiomatous polyp of tonsil in 10 days old male child.

CASE REPORT

A 10 days old male child presented with breathlessness and dysphagia. On endoscopy a large pedunculated, soft mass at right pharyngeal wall from lower pole of tonsil, hanging into the esophagus was detected. Laboratory tests, haemogram, ESR, bleeding and clotting time, blood sugar were normal. Excisional biopsy was performed. Histological diagnosis was done on paraffin embedded formalin fixed section stained with hematoxylin and eosin.

PATHOLOGICAL FINDINGS

Gross

A soft, elongated, intact polypoid mass of measurement 4x1.2x0.8cm was found. Externally congested, cut surface was edematous with gray white speckles. The representative tissue was processed.

Fig-1: Lymphangiomatous polyp, gross appearance

Microscopy

The section revealed a polypoid lesion lined by hyperplastic squamous epithelium and respiratory mucosa in combination. Subepithelial granulation tissue showed lymphoplasmacytes and large lymphoid aggregates of tonsillar tissue; with entrapped keratin pearls. The central core of polyp was comprising of loosely textured stroma, ectatic lymphatic spaces, lobules of mature adipose tissue and proliferating blood vessels. The lesion was diagnosed as lymphangiomatous polyp of tonsil.

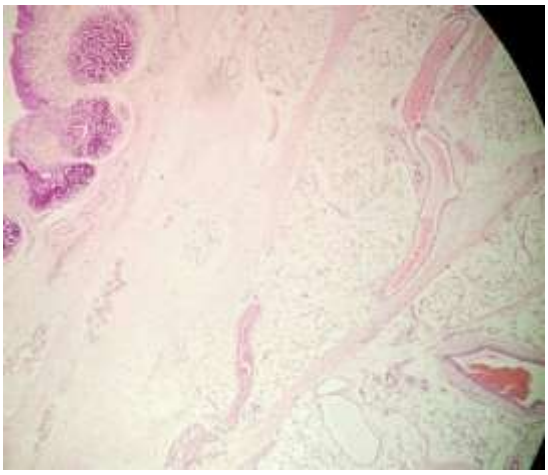

Fig-2: Photomicrograph showing lymphoid aggregates, adipose tissue, ectatic lymphatic spaces & blood vessels (H&E,x100)

DISCUSSION

Benign tumors or tumor like lesions of the palatine tonsil are less common than malignant ones. Squamous papilloma accounts for majority of benign lesion, whereas vascular tumors are rarely reported [3]. Kardon DE *et al* [2] studied a clinicopathologic series of 26 cases of lymphangiomatous polyps of tonsil and described the various histological features of polyps.

He included in his study, the equal numbers of males and females with age range between 3 to 63 years. The patients presented with dysphagia, sore throat and difficulty in swallowing. All cases were having unilateral tonsillar mass. Grossly all of the lesions were polypoid.

Microscopically the polyps were covered with squamous epithelium showing variable epithelial hyperplasia, dyskeratosis and lymphatic epitheliotrophism These polyps were composed of submucosal proliferation of lympho-vascular channels, variable amount of collagen, smooth muscle and adipose tissue in stroma [2].

Han suk Ryu *et al* [4] reported two cases of tonsillar lymphangiomatous polyps in a 49 year old man with chief complaint of foreign body sensation and a 30 year old man with painful tonsillar mass. In his second case he found prominent fibrous stroma and hyalinization compared with lymphanagiomatous proliferation. He used Masson trichrome and Congo red stains for making the differential diagnosis from amyloidosis.

Edward Park *et al* [5] reported unilateral lymphangiomatous polyp of palatine tonsil in a 3 year old girl having dysphagia to solid foods.

Khilnani A *et al* [6] reported lymphangiomatous tonsillar polyp in a 22 year old lady with chief complaint of left tonsillar mass.

Daniel Jose *et al* [7] reported pedunculated polyp of palatine tonsil in a 14 year old girl presented with right tonsillar mass.

In our case, 10 days old male child was brought by his mother for difficulty in breathing and dysphagia. A large pedunculated, soft mass at right pharyngeal wall from lower pole of tonsil, hanging into the esophagus was detected on examination.

The most of the other cases reported in literature were of the adult age at the presentation. Our case is one of the youngest case reported in the literature till date.

The true incidence of these lesions is difficult to accurately assess from the literature. This may be due to confusing histological nomenclature used to describe benign lymphatic lesions.[2]

The pathogenesis of lymphangiomatous polyp is uncertain.Their may be hamartomatous proliferation, but they may also be the result of a chronic inflammatory hyperplasia [8].

The histopathological features in our case include dilated lymphatic channels, proliferated blood vessels, lymphoid aggregates, lobules of adipose tissue, haphazard proliferation of the elements that are normally found in the tonsil. The differential diagnosis should include juvenile angiofibroma, papilloma and lymphangioma [1].

It is important to distinguish lymphangiomatous polyp from juvenile angiofibroma as the latter lesion is usually treated more aggressively to prevent possible recurrence. Juvenile angiofibromas typically occur in the nasopharynx of adolescent boys, often attaining a large size, with extensive growth and even boney erosion and presenting with epistaxis due to the rich blood supply. Histologically, the stroma of angiofibroma is more cellular, composed of stellate and plump cells, and contains staghorn –like thin walled vascular channels. Lymphangiomatous polyps usually have a relatively paucicellular fibrous background and many more lymphocytes.

Squamous papilloma is usually an exophytic surface epithelial proliferation, arranged in multiple layers lacking lymphatic and lymphocytic components [2].

Lymphangiomas are neoplasms of endothelial-lined lymphatic spaces characterized by widely dilated and irregularly appearing vascular channels [1].

Regarding the management of the polypoid lesions, most authors suggest that a tonsillectomy is the curative procedure of choice [2, 9]. However some case reports recommended simple surgical exicision as an adequate measure instead of tonsillectomy [5, 7].

CONCLUSION

Lymphangiomatous polyp of palatine tonsil is a very unusual lesion found in the head and neck region. Lymphangiomatous polyp is a rare hamartomatous lesion, frequently presented as a unilateral mass and can be cured by simple surgical excision.

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