



ANGIOMYOMATOUS HAMARTOMA OF CERVICAL LYMPHNODE MIMICKING CAROTID BODY TUMOR

Surgery

Aarushi Vashist	Resident, Department of Otorhinolaryngology, PGIMS, Rohtak, Haryana India.
Manish Verma*	Professor, Department of Surgery, PGIMS, Rohtak, Haryana India. *Corresponding Author
Naman Purohit	Resident, Department of Surgery, PGIMS, Rohtak, Haryana India.
Yajnadatta Sarangi	Resident, Department of Surgery, PGIMS, Rohtak, Haryana India.
Raman Wadhwa	Professor, Department of Otorhinolaryngology, PGIMS, Rohtak, Haryana India.
Monika Gupta	Associate Professor, Department of Otorhinolaryngology, PGIMS, Rohtak, Haryana India.

ABSTRACT

Angiomyomatous hamartoma (AMH) is a rare entity of unknown etiology, preferentially involving lymph nodes of the inguinal region. We report a case of 24-year-old young male presenting with a painless slow growing mass in right carotid triangle, the excision of which revealed the features of Angiomyomatous hamartoma located at an unusual site. Its recognition is important for differential diagnosis from benign and malignant tumors of lymphnodes.

KEYWORDS

Angiomyomatous hamartoma, cervical lymphnode, carotid body tumor.

INTRODUCTION

Angiomyomatous hamartoma (AMH) is one of the rare causes of asymptomatic lymphadenopathy with unknown etiology; commonly affecting the inguinal and femoral lymph nodes. It is characterized by replacement of lymphoid follicles by haphazardly arranged combination of smooth muscle bundles, fibrous tissue and thick walled blood vessels [1]. Only few case reports of these lesions in the head and neck area have been published in the literature. Surgical excision is the treatment of choice. Diagnosis is confirmed on histopathology. Such a rare case in a young patient with clinical diagnosis of carotid body tumor is being described.

CASE REPORT

A 24-year old male presented with 6 months history of a painless slow growing mass in right carotid triangle of neck. Clinically the lump was mobile, non-tender; measuring 3X2 cm. There was no history of irradiation to neck or tuberculosis in family. On ultrasonography, a vascular mass arising from internal carotid artery was present. Carotid angiography showed splaying of internal carotid artery (LYRE'S sign). On Fine needle aspiration cytology (FNAC), diagnosis of carotid body tumor was made. Computed tomography (CT) didn't show any evidence of invasion of surrounding tissue. The excision biopsy under anaesthesia was performed.

Histopathology revealed a firm encapsulated soft tissue mass of size 2.5X1.5X0.5cm. External surface was congested. On cut section, grey white areas along with multiple hemorrhagic areas were identified.

On microscopy it showed predominantly organized lymphoid tissue with thick fibrous tissue containing blood vessels and haphazard arrangement of smooth muscle cells. There was no cellular pleomorphism, necrosis or mitosis (Fig.1a and 1b). On Immuno histochemistry, smooth muscle fibres were positive for smooth muscle actin (SMA), CD34 positive in endothelial cells and leucocyte common antigen(LCA) in lymphoid tissue. Based on the features described, a diagnosis of Angiomyomatous hamartoma was made

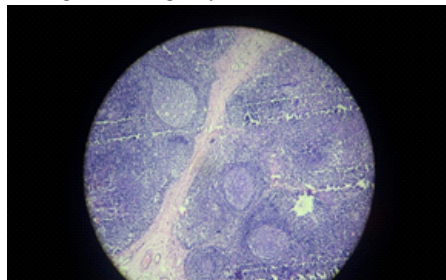


Fig. 1a: H & E stain (100X)

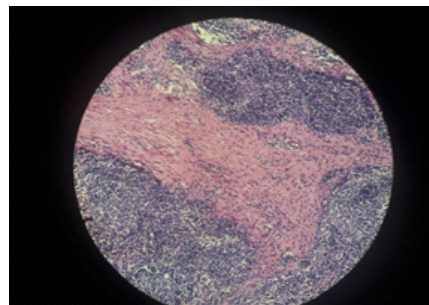


Fig. 2: H & E stain (200X)

DISCUSSION

Angiomyomatous hamartoma was first described by Chan *et al.* in 1992 [2]. It occurs most commonly in inguinal lymphnodes [3]. Other less commonly involved lymph nodes are popliteal, cervical, and submandibular [1,4,5].

The pathogenesis is still unknown, however impairment of lymphatic flow may be a factor related to its pathogenesis [3]. Chan *et al* thought that its pathogenesis can be either due to acquired etiology or may represent as a reparative reaction against previous nodal inflammation [2]. Diagnosis is based on histopathology. Microscopically these lesions show complete or partial replacement of the lymph nodal parenchyma with proliferation of the blood vessels, smooth muscle cells and connective tissue stroma [6]. Surgical resection is the treatment of choice and till date no recurrence has been reported.

To conclude, Angiomatous hamartoma is a rare, benign cause of lymphadenopathy, which should be considered in the differential diagnosis of benign and malignant tumors of the lymphnode. Also, recognizing this entity is extremely important to avoid unnecessary radical surgery.

REFERENCES

- [1] Ghosh P, Saha K, Ghosh AK. Vascular transformation of bilateral cervical lymph node sinuses: a rare entity masquerading as tumor recurrence. *J Maxillofac Oral Surg.* 2015;14:397-400.
- [2] Chan JK, Frizzera G, Fletcher CD, Rosai J. Primary vascular tumors of lymph nodes other than Kaposi's sarcoma. Analysis of 39 cases and delineation of two new entities. *Am J Surg Pathol* 1992;16:335-50.
- [3] Sakurai Y, Shoji M, Matsubara T, Imazu H, Hasegawa S, Ochiai M, *et al.* Angiomyomatous hamartoma and associated stromal lesions in the right inguinal lymph node: A case report. *Pathol Int* 2000;50:655-9.
- [4] Prusac IK, Juric I, Lamovec J, Culic V. Angiomyomatous hamartoma of the popliteal lymph nodes in a patient with Klippel-Trenaunay syndrome: case report. *Fetal Pediatr Pathol.* 2011;30:320-4.
- [5] Barzilai G, Schindler Y, Cohen-Kerem R. Angiomyomatous hamartoma in a submandibular lymph node: a case report. *Ear Nose Throat J.* 2009;88:831-2.
- [6] Mauro CS, McGough RL 3rd, Rao UN. Angiomyomatous hamartoma of a popliteal lymph node: An unusual cause of posterior knee pain. *Ann Diagn Pathol* 2008;12:372-4.