

A rare lesion of cervical lymph nodes: Angiomyomatous hamartoma

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ABSTRACT

Objective: Angiomyomatous hamartomas are extremely rare, tumor-like lesions of the lymph nodes. They are usually seen in the inguinal region lymph nodes. They are rarely seen in the lymph nodes of the cervical region. Histopathologically, fibrous tissues, smooth muscle cells, and vascular structures are seen in the lymph node structure. It is important to distinguish it from benign and malignant lesions of the lymph node.

Case: A 1 cm diameter lymph node excision material removed from the cervical region of a 26-year-old male patient was sent to the pathology laboratory with a pre-diagnosis of lymphadenitis. 4- micron sections were taken from the paraffin blocks prepared from the tissues belonging to the lesion. The samples were examined by staining Hematoxylin-Eosin. In histopathological examination, it was found that almost all of the lymph node structure consisted of vascular structures and smooth muscle cells located on a fibrous ground. The case was reported as angiomyomatous hamartoma.

Conclusion: Angiomyomatous hamartomas are extremely rare lesions of the cervical lymph nodes and their consideration in differential diagnosis will reduce the risk of possible diagnostic error.

Keywords: Angiomyomatous hamartoma, cervical region, lymph node

INTRODUCTION

Angiomyomatous hamartoma is a benign vascular tumor of the lymph node with unknown etiology (1). The hamartomatous condition is defined as the irregular development of smooth muscle and vascular structures (1).

Angiomyomatous hamartoma in the lymph node was first reported in 1992 by Chan et al. (2). Some studies suggest that lymphatic flow disturbance is a factor associated with the pathogenesis of angiomyomatous hamartoma (3).

This rare tumor usually involves the femoral and inguinal lymph nodes (4). It can rarely be seen in femoral, cervical, popliteal, and postauricular lymph nodes (4). Local excision is sufficient for treatment (5).

CASE REPORT

A 26-year-old male patient was admitted to the hospital with the complaint of swelling in the left cervical region for about 1 year. Physical examination revealed that the mass was a semi-mobile mass, approximately 1 cm in diameter. No pathology was found in the patient's blood tests and chest X-ray.

Lymph node excision material was sent to the pathology laboratory with a pre-diagnosis of lymphadenitis. 4- micron sections were taken from the paraffin blocks prepared from the tissues belonging to the lesion.

The samples were examined by staining Hematoxylin-Eosin. In histopathological examination, it was found that almost all of the lymph node structure consisted of vascular structures and smooth muscle cells located on a fibrous ground (Figure 1).

Case Report

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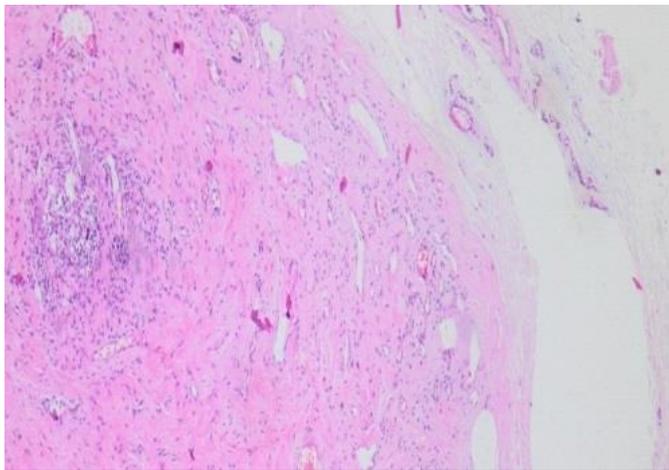


Figure 1: Vascular structures and smooth muscle cells located on a fibrous ground. (HEX100)

Pleomorphism, necrosis, atypical mitotic activity was not observed. Smooth muscle cells and vascular walls were stained with Smooth muscle actin in the immunohistochemical study. There were few residual lymphoid follicles in the tissue (Figure 2).

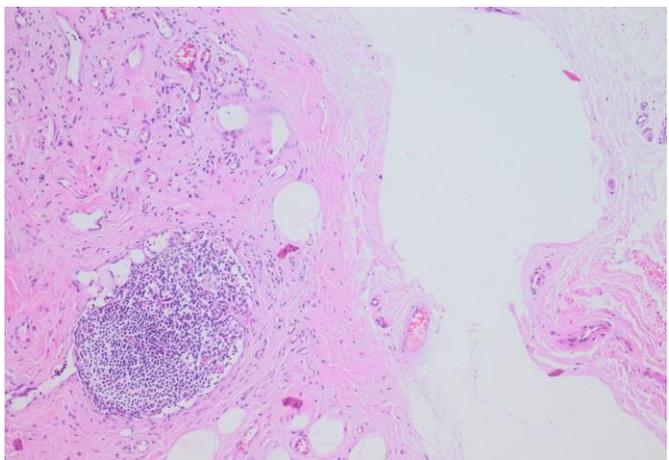


Figure 2: Few lymphoid follicles in the tissue. (HEX100)

Biclonal staining with CD3 and CD20 was observed in the lymphoid tissue that remained in a small number of the ground. The case was reported as angiomyomatous hamartoma.

DISCUSSION

Angiomyomatous hamartoma of the lymph nodes is a rare benign lesion of the lymph node consisting of smooth muscle proliferation and thick-walled blood vessels in the collagen stroma (2). Lymph nodes contain few residual lymphoid follicles (6). It is most common in middle-aged patients in the inguinal lymph nodes (3). They are rare lesions and the number of cases reported in the literature is around 50 (7,8,9). Few case reports on the head and neck region have been published in the literature (10,11). Local excisions are sufficient for treatment (5). It may lead to the development of a secondary lesion at the excision site after resection due to impaired lymphatic flow (8). The case is presented because of its extremely rare occurrence in cervical lymph nodes. Angiomyomatous hamartoma should be considered when

proliferating smooth muscle cells and vascular structures and few lymphoid tissues are seen in lymph nodes.

CONCLUSION

In conclusion, angiomyomatous hamartomas are extremely rare lesions of the cervical lymph nodes. It is important to distinguish it from benign and malignant lesions of the lymph node. Considering it in differential diagnosis will eliminate possible problems in the diagnosis and treatment of patients.

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Ethical issues: All authors declare originality of research.

REFERENCES

1. Ram M, Alsanjari N, Ansari N. Angiomyomatous hamartoma: a rare case report with review of the literature. *Rare Tumors* 2009;1: 75-78
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;4: 335-350
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;8: 655-659
4. Gamsızkan M, Akkaya A. Angiomyomatous hamartoma of postauricular lymph nodes (Case Report). *J Clin Anal Med* 2013;4: 420-422
5. Kim HS, Na KY, Lee JH, Cho NS, Kim GY, Lim SJ. Angiomyomatous Hamartoma of Popliteal Lymph Nodes Occurring in Association with Diffuse Pigmented Villonodular Synovitis of Knee. *Korean J Pathol* 2011;1: 58-61
6. Mauro CS, McGough RL, Rao UN. Angiomyomatous hamartoma of a popliteal lymph node: An unusual cause of posterior knee pain. *Ann Diagn Pathol* 2008;12: 372-374
7. Xu H, Feng X, Lockhart V, Cotelingam J, Veillon D, Shi M. Angiomyomatous hamartoma in the inguinal lymph node: A case report and literature review. *Human Pathology: Case Reports* 2020;3: 200351
8. Arava S, Gahlot GP, Deepak R, Sharma MC, Nath D, Ashok S. Angiomyomatous hamartoma of lymph nodes: clinicopathological study of 6 cases with review of literature. *Indian J. Pathol. Microbiol* 2016;2: 206-208
9. Moh M, Sangoi A.R, Rabban J.T. Angiomyomatous hamartoma of lymph nodes, revisited: clinicopathologic study of 21 cases, emphasizing its distinction from lymphangiomyomatosis of lymph nodes. *Hum. Pathol* 2017;10: 175-183
10. Laeng RH, Hotz MA, Borisch B. Angiomyomatous hamartoma of a cervical lymph node combined with haemangiomyatoids and vascular transformation of sinuses. *Histopathology* 1996;1: 80-84
11. Altun E, Azatçam M. Localized cervical lymph node angiomyomatous hamartoma: A case report. *Dicle Medical Journal* 2015;1: 86-88

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