Journal of Advanced Zoology

ISSN: 0253-7214
*Volume **44** Issue **02 Year 2023** Page **344:347***

Angiomyxolipoma A Rare Variant of Lipoma A Case Report

S. Almas Zareen[1], C.P. Luck, Sarah Kuruvilla[2], B.S. Sangeetha[3], J. Sheeja[4]

[1,2,3,4]*Tagore Medical College and Hospital, Chennai.*

**Corresponding author's E-mail: S. Almas Zareen*

Article History

Received: 06 June 2023
Revised: 05 Sept 2023
Accepted: 25 Nov 2023

Abstract

Angiomyxolipoma is a rare subtype of lipoma, is a tumor of mesenchymal origin, and several subtypes have been described that vary according to their location. It is an admixture of fatty tissue admixed with myxoid stroma and blood vessels. Here we report a case of a 43-year-old man presented with complaints of painless swelling in the left scapular region. Patient underwent for local excision which on histopathologic examination revealed poorly encapsulated lesion with an admixture of lobules of adipocytes, clumps of blood vessels of varying sizes and loose fibrous tissue with myxoid change which was consistent with angiomyxolipoma.

Keywords: *Angiomyxolipoma, Lipoma*

1. Introduction

Lipomas, whose major components are mature adipocytes, are the most common neoplasms of mesenchyme. Angiomyxolipoma (AML) is a rare subtype of lipoma, it is a tumor of mesenchymal origin. It was first described by Mai et al. Here we outline the clinical and histopathologic finding of the case with the utility of immunohistochemistry as a useful tool.

Case History

A 43-year-old man presented with complaints of slow growing painless swelling in the left scapular region. He noticed the swelling six months earlier with progressive increase in size. On physical examination, revelled a solitary, mobile, relatively well-demarcated subcutaneous mass measuring 3.5x3.5 cm in the left scapular region. Fine needle aspiration cytology of the lesion showed possibility of benign soft tissue neoplasm. Gross examination showed Cut opened partly cystic and partly solid mass, measuring 9.5 x 5 x 1.5cm. External surface was focally congested and grey brown. Cut surface appeared grey white, glistening with focal yellowish areas and cystic area showing thickened grey brown thickened cyst wall.

Histopathological examination showed poorly encapsulated lesion with an admixture of lobules of adipocytes, clumps of blood vessels of varying sizes and loose fibrous tissue with myxoid change (Figure1). Focal area showed lymphoangiomatous cystic dilatation (Figure 4). There was no evidence

of cytological atypia. Immunohistochemistry showed vimentin expression in myxoid area (Figure 6) with CD34 (Figure 5) seen in the vascular area.

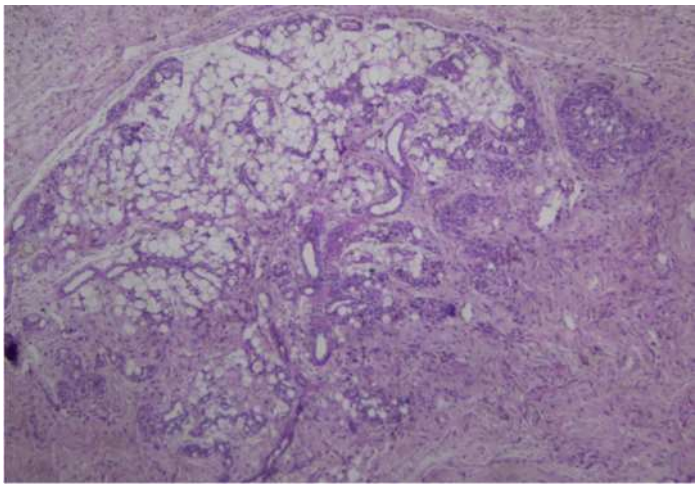


Figure 1: 4x view H&E stain Histopathological examination showed poorly encapsulated lesion with an admixture of lobules of adipocytes, clumps of blood vessels of varying sizes and loose fibrous tissue with myxoid change.

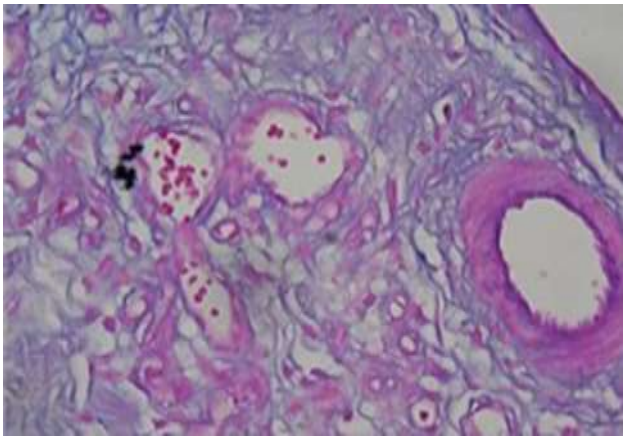


Figure 2: 40x view Alcian blue Angiomyxomatous component

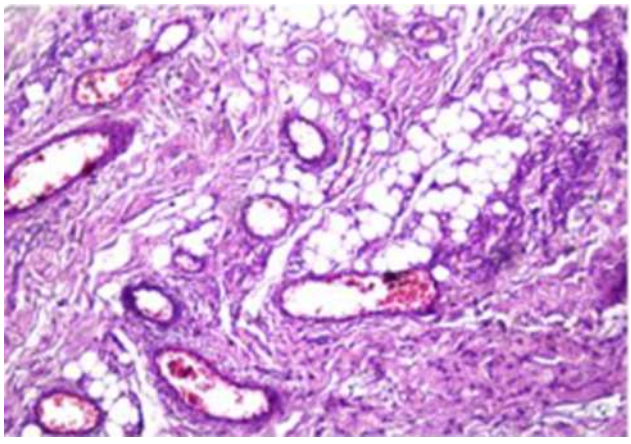


Figure 3: 10x view H&E stain Angiolipomatous component

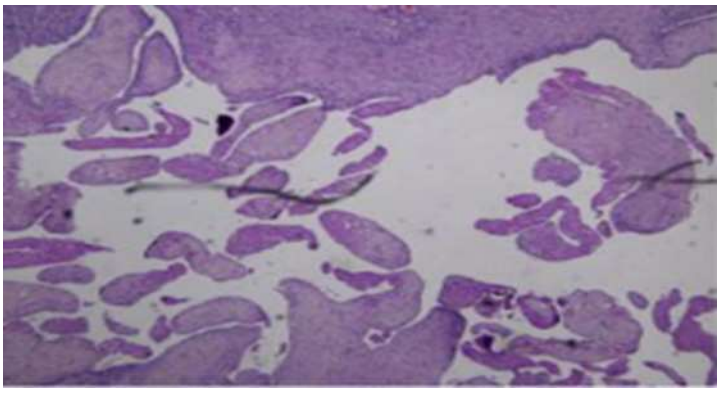


Figure 4: 4x view H&E stain Lymphangiomatous component

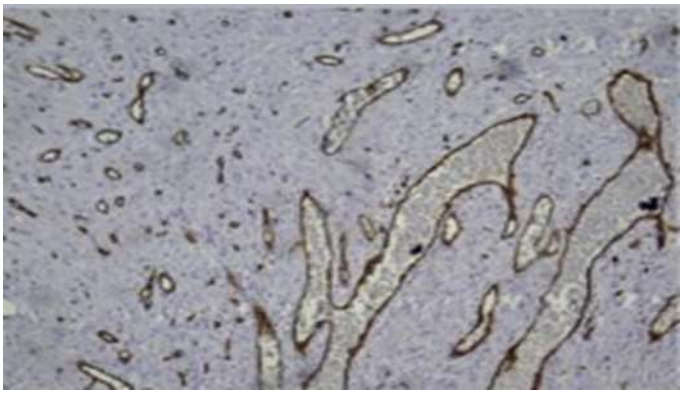


Figure 5: CD 34

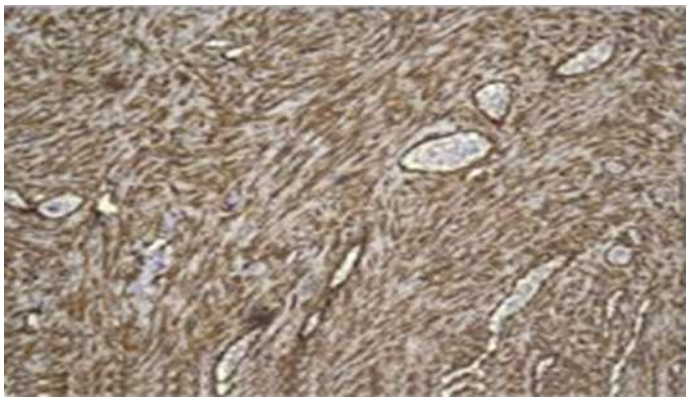
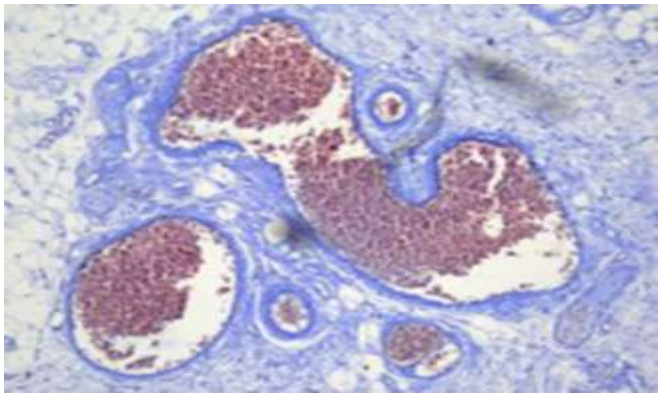


Figure 6: Vimentin



Figur 7: Masson's Trichrome

2. Results and Discussion

An adipose tissue tumor is the most common mesenchymal neoplasm, but its variants are rare. A number of different subtypes of lipoma have been described that vary according to their location and the presence of other tissue elements. Angiomyxolipoma is a rare variant of lipoma, with very few cases being reported in the literature. It was first described by Mai et al in 1996. The patients age ranged from 32 to 69 years, with a male preponderance. Presents as a solitary, mobile, well-demarcated, non-encapsulated subcutaneous mass with a yellow gelatinous cut-surface. The lesion

may be associated with pain, owing to its increased vascularity. The histopathologic features of angiomyxolipoma is characterized by a proliferation of adipocytes associated with a myxoid background and multiple blood vessels. In contrast, simple lipomas are encapsulated painless rounded masses with a pale yellow to orange color with a uniform greasy surface and an irregular lobular pattern. Immunohistochemical studies show vimentin expression in myxoid area with CD34 & SMA seen in the vascular area. The mature adipocytes were focally positive for S-100 protein. A cytogenetic study of angiomyxolipoma revealed chromosomal aberrations involving translocations t(7;13) (p15;q13) and t(8:12) (q12;13), similar to those found in normal lipoma. The differential diagnosis includes variants of lipomas, such as Myxolipoma, Angiolipoma, Angiomyolipoma, Myxoid spindle cell lipoma and Myxoid liposarcoma and low-grade Myxofibrosarcoma. A myxoid liposarcoma is composed of lipoblasts, express S-100 protein, and vascular structures in a fine branching pattern. Low-grade myxofibrosarcoma exhibits numerous elongated curvilinear vessels or a plexiform vascular pattern in a myxoid matrix with increased pleomorphism.

Clinical Features and Immunohistochemical Study of Angiomyxolipoma in Literature

Case	Reference	Gender/age	Location	Duration	Ihc
1	Mai et al	M/32	SPERMATIC CORD	3 MONTHS	VIMENTIN, S100 & SMA +
2	Zamecnik	M/57	SCALP	NS	CD34 +
3	Sciot et al	F/60	THIGH	4 MONTH	CD34,VIMENTIN S100 & SMA +
4	Tardio at al	M/66	SCALP	NS	CD34,VIMENTIN, S100 & SMA +
5	Lee et al	M/44	ARM	7 YEARS	CD34,VIMENTIN, S100 & SMA +
6	Lee et al	M/57	WRIST	2YEARS	CD34,VIMENTIN, S100 & SMA +
7	Sanchez et al	M/43	SUBUNGUAL AREA	1YEAR	NP
8	Kang et al	M/38	GLUTEAL AREA	3YEARS	CD34,VIMENTIN, S100 & SMA +
9	Song ae al	M/69	ILIAC CREST	3YEARS	CD34,VIMENTIN, S100 & SMA +
10	PRESENT CASE	43/M	LEFT SCAPULAR REGION	NS	CD34, VIMENTIN +

3. Conclusion

Angiomyxolipoma presents as a rare variant of lipoma. Additional immunohistochemical studies can help to differentiate angiomyxolipoma from other lipomatous neoplasms. Histopathologic findings showing a mixture of adipose tissue, myxoid stroma and abundant blood vessels without immature or atypical cells should suggest to pathologists a diagnosis of angiomyxolipoma with its benign nature.

References:

1) usta u, puyan ÖF, Can N, Kutlu AK, Sezer A. A rare case of angiomyxolipoma: Differential diagnosis from other vascular and myxoid tumors. Trakya Üniversitesi Tıp Fakültesi Dergisi. 2010.
2) Song, Margaret et al. “Angiomyxolipoma (vascular myxolipoma) of subcutaneous tissue.” Annals of dermatology vol. 21,2 (2009): 189-92. doi:10.5021/ad.2009.21.2.189
3) Weiss SW, Goldblum JR. Benign lipomatous tumors. In: Weiss SW, Goldblum JR, Enzinger FM, editors. Enzinger and Weiss's soft tissue tumors. 4th ed. St. Louis: Mosby; 2001. pp. 384–430.
4) Mai KT, Yazdi HM, Collins JP. Vascular myxolipoma ("angiomyxolipoma") of the spermatic cord. Am J Surg Pathol. 1996; 20:1145–1148.
5) Zamecnik M. Vascular myxolipoma (angiomyxolipoma) of subcutaneous tissue. Histopathology. 1999; 34:180–181.