Case Report

A Large Inguinal Angiofibroma: A Rare Entity

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ABSTRACT

Angiofibroma of the groin is a rare soft tissue benign tumor. Here we emphasize upon its diagnosis and management with a follow up in post-operative period. Microscopic demonstration of well circumscribed spindle cells and hyalinised vessels along with immunohistochemistry helps in clinching a diagnosis.

KEY WORDS: Angiofibroma, Inguinal Swellings, Soft Tissue Tumours, Immunohistochemistry.

INTRODUCTION

Nucci et al. in 1997 first mentioned about cellular angiofibroma as a rare benign soft tissue tumor [1]. This soft tissue tumor usually found in the distal genital tract of either sex like: inguino-scrotal area in male and vulvo-vaginal region in females [1,2], this tumor has no morphological differences in either gender according WHO classification [3].

Grossly these tumors are well circumscribed, reside in the superficial soft tissue and contain: spindle cells and small to medium-sized vessels with mural hyalinization [4].

CASE REPORT

A 65 year female attended surgery OPD with complains of painless, gradually progressive swelling over the right groin area for one year. It was gradually increased in size and attained present size after a year. No history of fever, pain, weight loss or other sign of chronic illness.
Overlying skin had no scar or dilated veins. All routine investigations performed which were perfectly in normal range.

Radiologically- USG with color Doppler suggested a well-defined heterogeneous hypo-echoic space occupying lesion in right thigh and groin region in the subcutaneous plane, which showed vascular arterial and venous components suggestive of arteriovenous malformation.

CT angiography right lower limb showed a large enhancing mass lesion in the subcutaneous plane in right upper thigh inguinal region. No underlying muscle invasion and major arterial supply or venous drainage were seen.

FNAC suggestive of blood mixed aspirate showing some fibrous stromal fragments, some mixoid appearing matrix with embedded spindle cells. Suggestive of ?? Hamartoma, Firm myxoid tumor.

Finally, patient planned for excision and biopsy and under anaesthesia complete excision of swelling with capsule done. Swelling was found to be confined to the subcutaneous plane with tail extending into deep plane and simulating a hernia. Primary closure of wound was followed by an uneventful postoperative period. Suture removed on day eighth post-operative day in OPD. Intra operative findings are depicted in Figures 1 to 5.

After a great deal of dilemma, the lesion finally labelled as an “angiofibroma” on the basis histopathological report Fig 6, 7.

Report shows well defined spindle cell tumor with uniform stromal cells and hyalinised vessels.

The patient on his six monthly follow up was found to be doing good with no loco-regional recurrence of swelling.
DISCUSSION

Cellular angiofibroma is a rare soft tissue tumor with equal prevalence in both genders, but a more preponderance is seen towards fifth decade of females and seventh decade of males [5].

Commonest site for cellular angiofibroma is subcutaneous tissue of the vulva in women and in inguinal and scrotal regions of men [6]. However, some angiofibromas also reported in subcutaneous tissue chest wall, retroperitoneum and the oral cavity [6-8].

Microscopically, cellular angiofibroma is a well circumscribed spindle cell tumor consisting of uniform stromal cells and hyalinised vessels, therefore the name angiofibroma was suggested on the basis of predominant blood vessels and the uniform stromal cells [1].

Cellular angiofibroma sometimes may associated with cellular atypia or sarcomatous transformation morphology [9]. These cases only require local excision with clear margins and long-term follow-up [5, 6].

Angiofibroma is well encapsulated and hypervascular tumor where surgical excision of the lump along with its capsule prevent its recurrence, with minimal blood loss [5].

Clinical demonstration of cellular angiofibroma may simulate many benign tumors like leiomyoma, angiomyofibroblastoma, spindle cell lymphoma and perineurioma [1, 11] for there are many common features between these tumors, but cellular angiofibroma differentiated with others by distinguishing feature of bland spindle cells and prominent hyalinized blood vessels in biopsy [1, 10, 11].

Moreover, immunohistochemistry plays a substantial role in differentiating from these tumors as Cellular angiofibromas are consistently positive for vimentin with variable expression of CD34 and desmin, and negative for smooth muscle actin (SMA) and S-100 [10, 12].

Our case was a well-defined swelling in right groin region that simulated all above mentioned benign tumour along with inguinal and femoral hernia. These were ruled out on the basis of clinical findings and radiological investigations. Lesion was managed by complete excision and follow up. Final diagnosis of cellular angiofibroma was confirmed on the basis of histopathological findings.

CONCLUSION

Angiofibroma as a differential diagnosis of inguinal swelling is rare finding compared to the more prevalent conditions as hernias or lymph node masses. However a watchful examination with adequate use of radiological and pathological investigations is recommended.

REFERENCES


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