Surgery Clinics Journal

ISSN: 2687-6973

Case Report

An Interesting Case of Spindle Cell Hemangioma

Divyan Devasir, Vineeth Sridharan and V Shruthi Kamal*

Saveetha Medical College, Saveetha Institute of Medical and Technical Sciences, India

Abstract

Spindle cell hemangioma is a uncommon tumour that usually presents as subcutaneous or deep dermal nodule that affects the extremities. We report a case of a 18 year old girl who presented with complaints of swelling in the right elbow for the past two years , the patient had undergone excision biopsy for the same swelling before 2 years and the attempt was unsuccessful because the swelling was adherent to underlying structures . The further evaluation of the patient is done with radiological investigations.

Ultrasonogram of that region showed that it's a predominant solid lesion with internal vascularity running throughout, the lesion is hypoechoiec with internal hyperechoiec regions, and the lesion is free from osseous involvement. Magnetic Resonance imaging Showed a lobulated mixed intense lesion seen in posterior subcutaneous compartment, myotendinous structures appears normal; the final impression suggested that it could be a inflammatory/neoplastic etiology. Fine Needle aspiration Cytology suggested that it could be a vascular lesion. Core needle biopsy suggested that features suggestive of low grade spindle cell neoplasm probably neural in origin. With the above investigations the patient was planned for Wide Local Excision with primary skin closure. The specimen was sent for histopathological examination and the final impression was spindle cell haemangioma. The post operative period of the patient was uneventful and the further follow up is advised to the patient.

Keywords: An interesting case of spindle cell hemangioma; Ultrasonogram; Vascular lesion

Introduction

Spindle cell hemangioma was described by weiss and enziger in 1986. It's a vascular tumour of low grade malignancy, occurs in extremities. It occurs in dermis and subcutaneous tissues [1]. This will have features of both cavernous hemangioma and kaposi sarcoma. There will be minimal or no mitosis. More than 50% can re occur .Spindle cell hemangiomas have a predilection for extremities? Injury can cause reactive vascular proliferation .Multiple SCH are associated with klippel trenaunay syndrome, maffucci syndrome. Although spindle cell hemangioma is a benign lesion they have a tendency to re occur after surgery [2].

Spindle cell hemangioma can occur as a solitary or multiple syndromic or non syndromic lesions. It has got no gender predilection and affects individuals of different ages although spindle cell hemangioma can occur in variety of anatomic sites, its occurrence in head and neck is a rare entity.

The standard surgery for it is wide local excision .In other cases where there are multiple lesions excision may even be even more disfiguring and morbid. For lesions that are surgically difficult to excise radiotherapy, low dose interferon alpha-2b and intralesional and intraarterial administration of recombinant interleukin 2 has been successful [3].

Citation: Devasir D, Sridharan V, Shruthi Kamal V. An Interesting Case of Spindle Cell Hemangioma. Surg Clin J. 2021; 2(6): 1040.

Publisher Name: Medtext Publications LLC

Manuscript compiled: Nov 04th, 2021

***Corresponding author:** Vineeth Sridharan, Saveetha Medical College, Saveetha Institute of Medical and Technical Sciences, Tamil Nadu, India, Tel: +91-9840024077; E-mail: sridharvineeth@gmail.com

Case Presentation

A 18 year old female came with complaints of swelling in the right elbow for 2 years. The swelling progressively increased to attain the present size .There is no complaints of pain. There are no complaints of restriction of movements. The patient has a previous history of surgery for the same swelling and the attempt was unsuccessful at that time since it was tightly adherent to the underlying structures [4].

Swelling in the extensor aspect of the elbow right side (posterior). Size of the swelling 4 cm × 3.5 cm hemispherical in shape. Scar due to previous surgery present, skin is mild shiny. Skin free over all areas over swelling except the previous scar site, Soft in consistency, Smooth surface.

Ultrasonogram showed a predominantly solid lesion in right elbow (Figure 1), Internal vascularity noted and appears running throughout the swelling. The lesion is hypoechoic with internal hyperechoic regions. The lesion in its posterior aspect appears to invade past the subcutaneous tissue to involve just superficial to the muscular layer. Lesion free from osseous involvement.

Magnetic resonance imaging showed a lobulated mixed intense (predominantly T2 hyperintense) lesion seen in posterior subcutaneous compartment. Lesion measures 2.5 × 1.3 in oblique and axial dimensions. Small calcific foci seen within the lesion in CT screening. Myotendinous structures appears normal .The final impression suggests that the lesion is not specific to a particular etiology, the possibilities that may be considered as differentials includes inflammatory/neoplastic etiology.

Fine Needle Aspiration Cytology from the swelling suggested that it could be a vascular lesion and was inconclusive and the patient was planned for Core needle biopsy. The Core needle biopsy suggests, Features suggestive of low grade spindle cell neoplasm .Probably neural in origin (Figure 2).

With the above investigations the possibility of other causes could

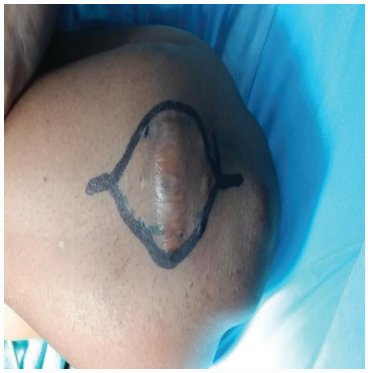

Figure 1: Predominantly solid lesion in right elbow.

not be ruled out for the patient .The patient was thereby planned for wide local excision of the tumour with primary closure. Under axillary block, with arm abducted and flexed at the right elbow Elliptical incision made Superior and inferior flaps raised 2 cm margin clearance given all around. Posterior clearance upto perimysium given. Specimen orientation done. Hemostasis achieved. Skin closed.

The entire post operative period was uneventful. The patient was put on a POP slab immediately following surgery.

Suture removal on Day 14. There was no restriction in mobility of elbow joint following surgery. The histopathological report following surgery shows microscopy sections shows stratified squamous epithelium, with underlying adipose tissue, smooth muscle fibres and spindle cells, and congested blood vessals, the resected margins show no pathology (Figure 3).

Final impression -spindle cell hemangioma

After discharging from the hospital the patient was advised regular follow up, the patient is also in regular follow up and there is no a complication or recurrence (Figure 4).

Discussion

Spindle cell hemangioma is a benign blood vessel tumour that forms on or under the skin. Spindle cell hemangiomas have special cells known as spindle cell that looks long and slender under a microscope. These tumours are painful red-brown or bluish lesions that usually appear in arms and legs they are a type of vascular tumours. Spindle cell hemangioma has presented as single tumour in our patient. The spindle cell hemangiomas generally occurs in dermis or subcutaneous tissues and rarely occurs in deep soft tissues .Spindle

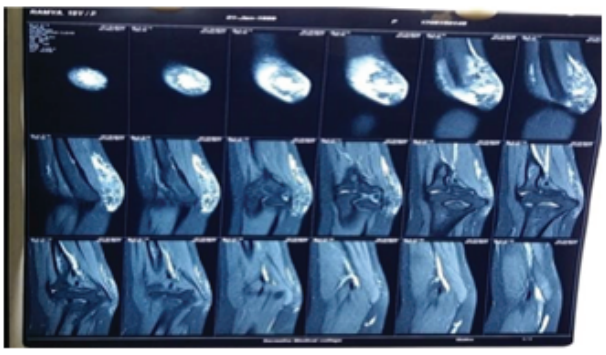

Figure 2: MRI scan.

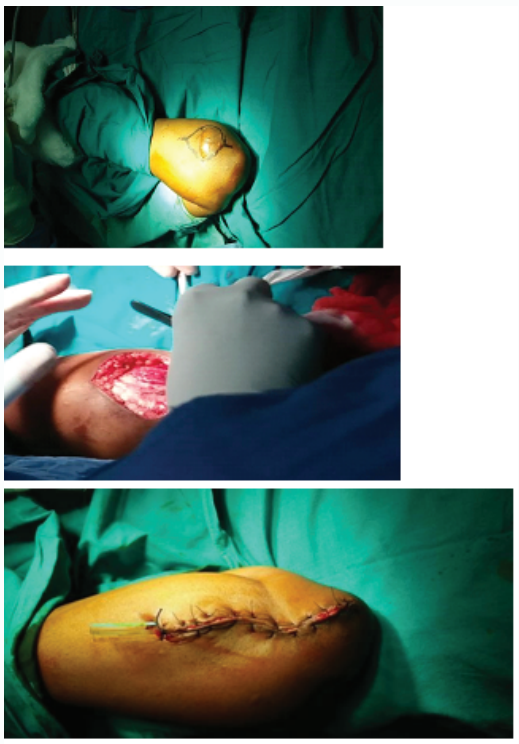

Figure 3: Intra operative pictures.

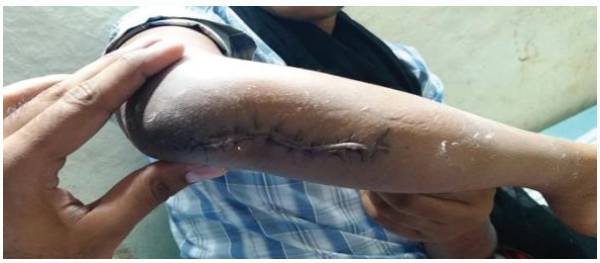

Figure 4: Post operative picture.

cell hemangiomas is usually asymptomatic in the early stages but late presentations can cause cosmetic disfigurement [5].

Although pathogenesis and exact biological behavior of spindle cell hemangiomas is still unknown some authors have proposed that it may be a reactive or a benign neoplasm , while others have suggested that thrombosis and subsequent recanalisation in a previous vascular tumour . Histologically, the spindle cells seen in both in Spindle cell hemangiomas and kaposi sarcomas. However cavernous spaces and epithelial vacuolated cells are not present in Kaposi sarcoma [6].

The treatment option includes surgery, systemic steroids, crytherapy, laser therapy, radiation therapy, cytotoxic drugs, selective embolisation and recombinant interleukin-2 [7]. It is a benign lesion and most widely accepted treatment option presently is wide local excision without chemotherapy or radiotherapy following excision local recurrence rate of more than 58% has been reported. Recurrences occur more common in patients with multiple lesions. It has been suggested that most of the recurrence represent multifocal tumours arising in the same anatomic region, possibly resulting from

an underlying vascular abnormality or intravascular propogation of the lesion. Radiation therapy is not advised due to the risk of malignant transformation [8,9]. The spindle cell hemangiomas does not have the capacity to metastasize and the only reported malignant transformation with metastasis reported in literature is considered to be radiation induced sarcomatous transformation.

Conclusion

We present a case of spindle cell hemangioma occurring in extremity that was completely excised by wide local excision with surgically acceptable aesthetics. Although the exact biological behavior of this lesion is not yet fully known, it is a benign lesion and surgical excision and regular follow up remains the current acceptable mode of treatment. It is therefore extremely important that the surgeons have a high degree of suspicion and good accurate histogical diagnosis to avoid instituting other management modes that may worsen the outcomes in these patients.

References

1. Weiss SW, Enzinger FM. Spindle cell hemangioendothelioma. A low-grade angiosarcoma resembling a cavernous hemangioma and Kaposi's sarcoma. Am J Surg Pathol. 1986;10(8)521-30.
2. Imayama S, Murakamai Y, Hashimoto H, Hori Y. Spindle cell hemangioendothelioma exhibits the ultrastructural features of reactive vascular proliferation rather than of angiosarcoma. Am J Clin Pathol. 1992;97(2):279-87.
3. Tomasini C, Aloi F, Soro E, Elia V. Spindle cell hemangioma. Dermatology. 1999;199(3):274-6.
4. Weiss SW, Goldbum JR. Enzinger and Weiss's Soft Tissue Tumors. 4th ed. St Louis: CV Mosby; 2001. Benign tumours and tumour-like lesions of blood vessels; p. 853-4.
5. Rokunohe D, Takeda H, Kaneko T, Aizu T, Akasaka E, Matsuzaki Y, et al. Spindle cell haemangioma and decorin expression. J Cosmet Dermatol Sci Appl. 2012;2(1):8-10.
6. Suranagi V, Harugop SA, Bannur BH, Pilli SG, Mudhol SR. Spindle cell haemangioma of the nasal cavity: A rare tumor with unusual presentation. Clin Rhinol. 2013;6(3):149-51.
7. Dhawan SS, Raza M. Spindle cell hemangioendothelioma. Cutis. 2007;79(2):125-8.
8. Perkins P, Weiss SW. Spindle cell hemangioendothelioma. An analysis of 78 cases with reassessment of its pathogenesis and biologic behavior. Am J Surg Pathol. 1996;20(10):1196-204.
9. Setoyama M, Shimada H, Miyazono N, Baba Y, Kanzaki T. Spindle cell hemangioendothelioma: Successful treatment with recombinant interleukin-2. Br J Dermatol. 2000;142(6):1238-9.