

## VERRUCOUS HEMANGIOMA : A RARE VASCULAR TUMOR- A CASE REPORT

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### ABSTRACT

Verrucous hemangioma is an uncommon capillary / cavernous hemangioma with many reactive changes noted in the overlying epidermis, including hyperkeratosis, acanthosis and papillomatosis. It usually involves the lower extremities and spreads slowly. As it spreads, satellite nodules

may develop. We present a case of 68 yr old male who presented with an asymptomatic warty growth over the medial malleolus on the left foot.

**Key words :** verrucous, hemangioma, hyperkeratosis, papillomatosis

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### INTRODUCTION

Verrucous hemangiomas are not very uncommon<sup>1</sup>, however this histopathological variant needs a special mention as it can clinically mimic malignancy. Verrucous hemangiomas are usually congenital, vascular malformation, histologically characterised by dilated capillaries and large cavernous spaces, lined by endothelium. These dilated spaces extend into the reticular dermis and subcutaneous fat. The overlying epidermis shows reactive hyperplasia with marked acanthosis, hyperkeratosis and papillomatosis. These lesions have to be excised with a wider clearance, as chances of recurrence is very high.

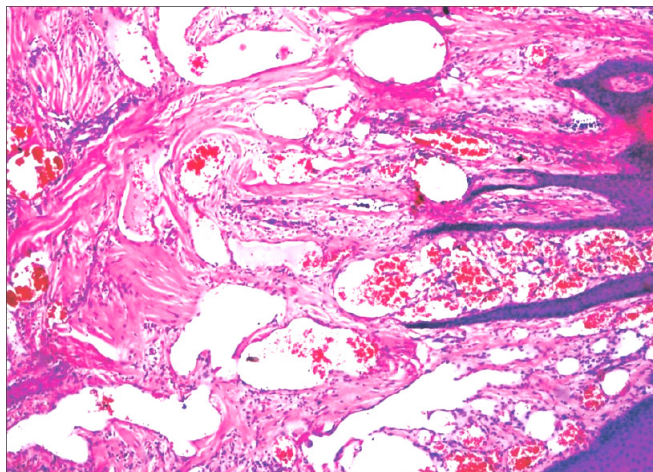
### CLINICAL DETAILS

A 68 year old male patient presented with a history of asymptomatic ,verrucous skin lesion measuring 2x2 cms, above the medial malleolus on the left foot. Over the past two years he noticed a sudden increase in size and change in colour to black associated with pain and episodes of bleeding following trauma. On examination, there was a discrete verrucous, bluish-black plaque over the left foot of size 2x2 cms. X-ray and ultrasound imaging showed a soft tissue lesion with subcutaneous extension but not involving the bone or muscle. The lesion was excised and send for histopathological examination.

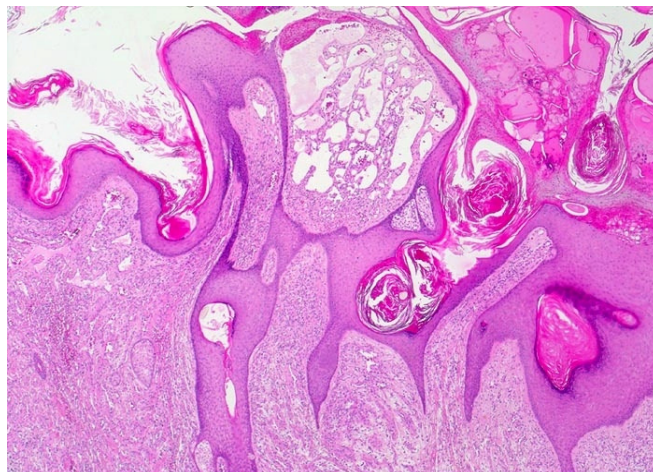
### PATHOLOGIC FINDINGS

Grossly received skin covered soft tissue bits measuring 3x2x1cm, cut surface upper 1/3 rd blackish colour. On light microscopy, it was a verrucous lesion

with epidermal hyperkeratosis, acanthosis and papillomatosis. Several thin walled dilated capillaries were seen in the papillary dermis, that was also seen extending into the underlying reticular dermis and subcutaneous tissue. (Fig. 1, 2). These vascular channels, lined by endothelial cells were filled with RBCs. The surgical resected margin was free of tumor. The patient did not present with recurrence in the follow up check ups.



**Fig.1:** ( H and Ex200) Dilated capillaries in the dermis



**Fig.2:** (H and Ex200) Epidermal hyperkeratosis, acanthosis and papillomatosis.

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## DISCUSSION

Verrucous hemangioma is an uncommon, congenital localised vascular malformation. It was first described by Halter in 1937. Loria et al defined this entity in 1958 and in 1967, the term of verrucous hemangioma was coined by Imperial and Helwig.<sup>[1]</sup> This lesion mainly presents at birth or in early childhood and the commonest location is the lower extremities. The original lesions are bluish red in colour, but frequent complications bring about secondary changes on the surface like verrucous or warty texture.<sup>[2]</sup> Clinically the lesion has a resemblance to angiokeratoma, lymphangioma circumscriptum, verrucous epidermal nevus, verrucous carcinoma and rarely even malignant melanoma.<sup>[3]</sup> The lesion can sometimes present as linear or serpiginous fashion.<sup>[4]</sup> Histologically verrucous hemangioma presents as an epidermis with irregular acanthosis and hyperkeratosis. The abnormal proliferating vascular channels are located in the dermis and hypodermis. The hemangiomatous component is greatly composed of dilated capillaries and larger cavernous, endothelium lined blood filled spaces. Inflammatory cells, hemosiderin and fibrosis may be present in the upper dermis. These features closely resemble angiokeratoma but in this condition, the lesion is limited to the papillary dermis whereas in verrucous hemangioma the lesion also extends into the subcutaneous fat. Immunohistochemical staining with endothelial markers like CD 31, CD 34 and GLUT 1 may highlight the endothelial cells, but the diagnosis can be made by light microscopic features.

Imaging studies like nuclear magnetic resonance help in visualising the deeper tissues. This helps in the therapeutic management of these patients, while angiokeratoma circumscriptum can be treated with the usual physical methods like electrocoagulation, cryotherapy, and argon laser, verrucous hemangioma requires wide excision to avoid possible recurrence.<sup>[5]</sup>

A diagnosis of verrucous hemangioma should be considered in vascular papules, nodules and plaques especially those with a hyperkeratotic bluish red nodular appearance located on the lower extremities.<sup>[6]</sup>

## CONCLUSION

We present this case for its rarity of its occurrence and its clinical inclusion in the differential diagnosis of various aforementioned conditions, including melanoma.

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