## Unique Presentation Of A Warty Lesion Masquerading Other Diseases - A Case Report

Dr. Syed Ameenuddin Ali[1], Dr. Nausheen Syed[2], Dr. Jayant Gadekar[3]

[1]Resident, Department Of Surgery, [2]Resident, Department Of Dermatology, [3]Professor & Head, Department of Surgery, DVVPF's Medical College & Hospital, Ahmednagar - 414111

Corresponding Author : Dr. Syed Ameenuddin Ali

E-mail : alisyed.675@gmail.com

Address : Department of Surgery, DVVPF's Medical College & Hospital, Ahmednagar-414111

**Abstract :**

Verrucous hemangioma (VH) is an uncommon capillary or cavernous hemangioma which usually presents in early childhood as vascular papules, plaques or nodules. Principally, it is present on one of the lower extremities that enlarges over time. Therefore, early diagnosis is warranted to avoid deeper tissue resection. Pathologically it is characterized by reactive skin changes like hyperkeratosis and papillomatosis. Here, we discuss a rare presentation of a case of verrucous hemangioma with features mimicking a number of diseases causing a diagnostic dilemma.

**Key words:** Hemangioma, Verrucous hemangioma, Capillary/ Cavernous hemangioma

**Introduction:**

Verrucous Hemangioma was first described by Halter in 1937 and it was Loria et al who defined this entity in 1958. Finally, Imperial and Helwig coined the term Verrucous hemangioma in 1967.[(1)] Hemangioma is a congenital vascular anomaly infrequently seen. Verrucous hemangioma is a variant in which prominent epidermal response is seen. It usually presents at birth. The initial appearance is of a reddish area similar to port wine stains which later develops into a bluish swelling. The lesion is mostly present over the lower extremity. Other sites include head, trunk or upper limbs. Recurrent bleeding and infections are common. Secondary changes overlap with time, like verrucous texture or warty texture.[(2)] It does not undergo spontaneous involution.

**Case Report:** A 17-year old male presented to the Dermatology O.P.D with a pigmented, warty, painful lesion over the right foot since 6 months.**(Fig. 1)** It gradually increased in size. There was no history of trauma/itching/bleeding tendency/ resolution. On local examination, there was a 8 x 5 cm swelling over the lateral malleolus of the right foot. The overlying skin had a well circumscribed, hyperkeratotic purple-bluish plaque with verrucous surface and erythematous border almost involving the entire swelling. Swelling was firm, non-compressible, non-tender with no local signs of inflammation. Based on dermatological appearance differentials included, Cutaneous Tuberculosis verrucose cutis, Lupus Vulgaris, traumatized callosity, Blastomycosis, Cutaneous Leishmaniasis. TB-PCR was done to rule out tuberculosis. Ultrasound revealed a soft tissue swelling not involving the underlying muscle or bone. The patient was referred to the Surgery Department for biopsy of the lesion. Patient underwent complete en block excision of the swelling under local Anesthesia and the procedure was uneventful. **(Fig. 2)** Specimen was sent for histopathology which revealed hyperkeratotic stratified squamous lining epithelium with intact basement membrane. Papillomatosis was noted. Diffuse capillary proliferation lined by endothelial cells and lumen filled with RBCs was seen with adjacent fibro collagenous and soft tissue bits. **(Fig. 3)** Histopathological diagnosis of capillary hemangioma was made. On clinicopathological correlation a diagnosis of Verrucous hemangioma was made. On follow up visit suture site healed well with no recurrence after 4 months.

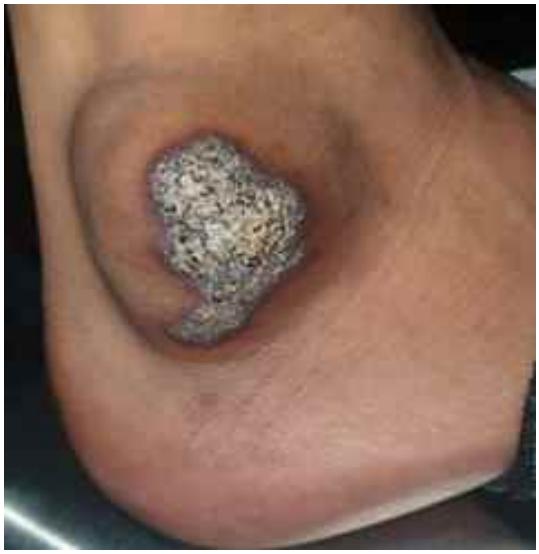

**Fig. 1: Hyperkeratotic plaque over the Right foot - Lateral Malleolus**

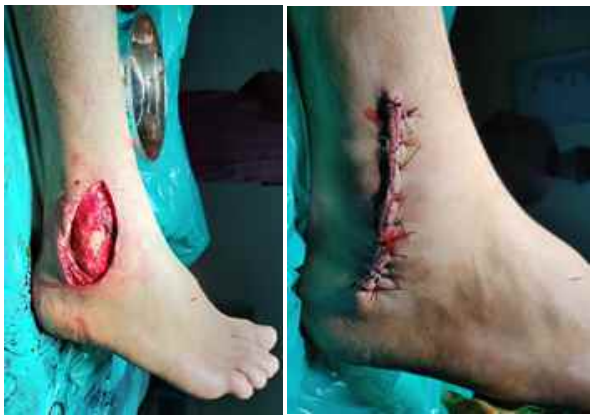

**Fig. 2: En block excision of swelling**

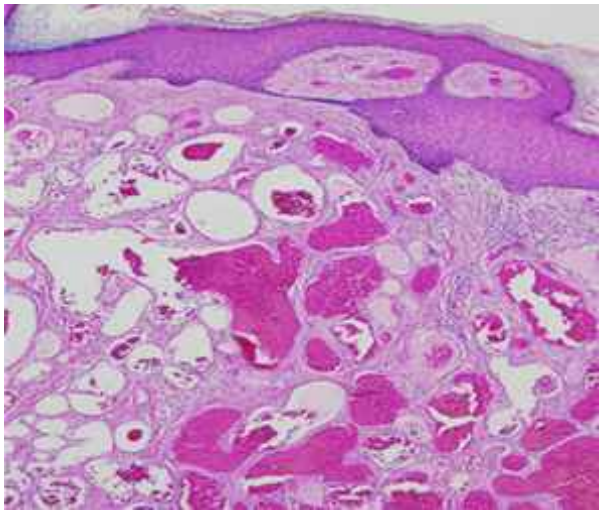

**Fig. 3: Hyperkeratosis with blood filled spaces lined by endothelial layer**

**Discussion:**

Verrucous hemangioma is a congenital vascular malformation frequently seen on the lower extremities. Although lesions are solitary and localized, multiple disseminated lesions without systemic involvement has also been described in the literature.[3]

Clinically the lesion has a resemblance to angiokeratoma, lymphangioma circumscriptum, verrucous epidermal nevus, verrucous carcinoma and rarely even malignant melanoma.[4] The lesion can sometimes present as a linear or serpiginous fashion. 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 may highlight the endothelial cells, but the diagnosis can be made by light microscopic features.[5]

VH do not spontaneously resolve which is why early diagnosis is necessary. Timely surgical excision yields to better cosmetic result. If we opt for superficial ablative procedures like electrocautery and cryosurgery, it invariably leads to recurrence of lesion.[6] Other modalities described are topical application of salicylic acid owing to its keratolytic property and/or super-potent topical steroids like halobetasol propionate due to its vasoconstrictive properties.[7] This modality, although effective may take months to resolve. It might aid in reducing in size prior to surgery, however surgical excision remains the treatment of choice.

**Conclusion:**

We present this case for its rarity of occurrence and its clinical inclusion in the differential diagnosis of various aforementioned conditions. This will aid in timely diagnosis and prompt treatment.

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