

Dermoscopy of the rare, unusual vascular tumor: Verrucous hemangioma

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Background

The term "verrucous hemangioma" was first used by Halter in 1937, but as a distinct entity it was first described by Imperial and Helwig in 1967, defined it as congenital vascular malformation comprising the capillary or cavernous hemangioma in the dermis and subcutaneous tissue associated with the reactive epidermal acanthosis, papillomatosis, and hyperkeratosis, distinguishing it from angiokeratoma.

Verrucous hemangioma is a rare, congenital vascular tumor, initially appearing as reddish macular area of the vascular staining resembling the "port-wine" stain. Over time, it darkens to purplish brown colour and become well demarcated, soft, compressible papule/nodule. When it acquires its characteristic bluish-black pigmentation, it is necessary to make its differentiation from the benign and malignant pigmented lesions, including the melanoma.

In contrast to infantile hemangiomas, VH does not resolve spontaneously. The course of the VH is generally characterized by peripheral slow spread and development of satellite lesions. Deep surgical excision is the treatment of choice.

In this report, the clinical, dermoscopic and histopathological features of Verrucous hemangioma in 14-year-old girl were described. To our knowledge, this report showing for the first time the dermoscopic features of VH.

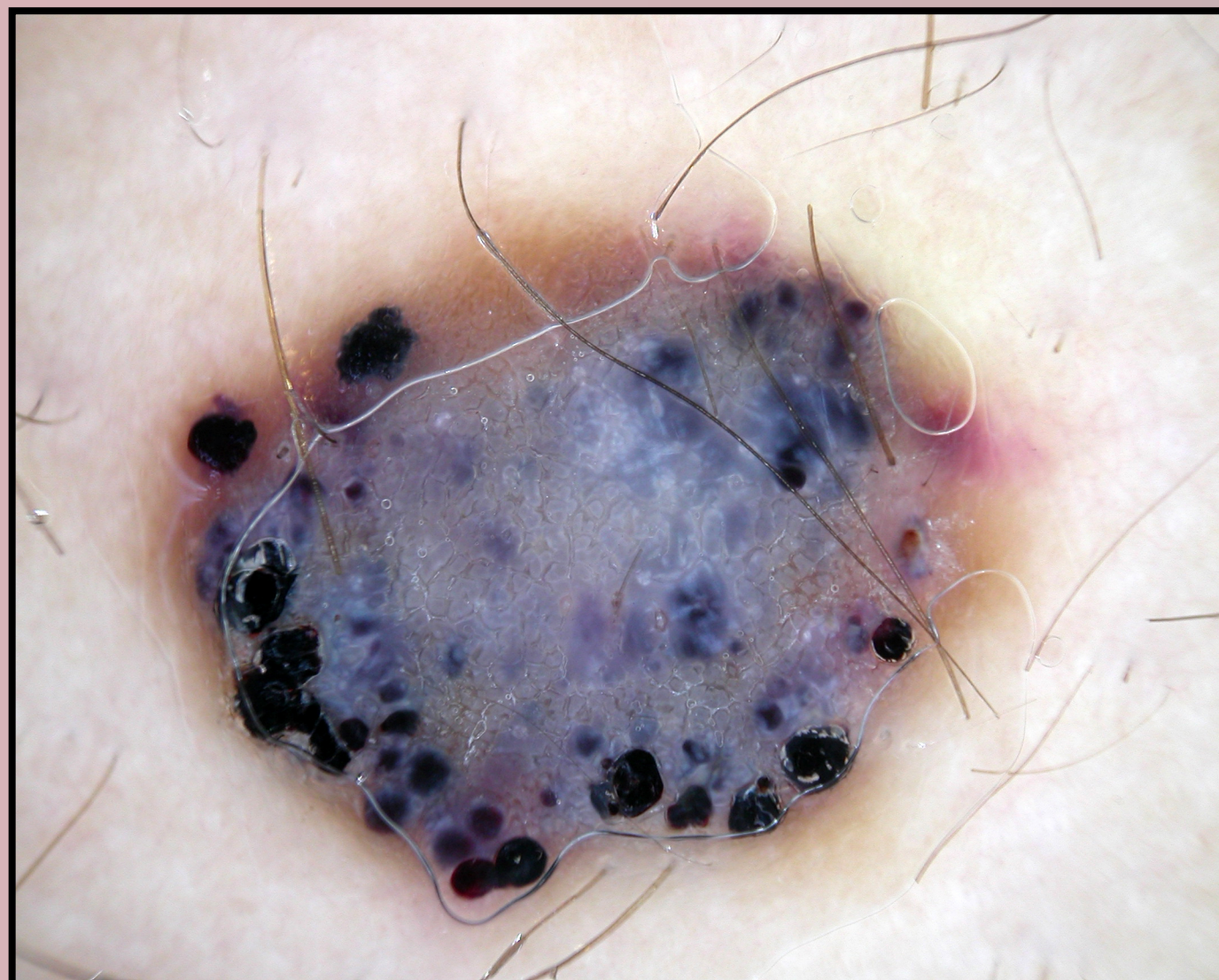


Figure 2.

Dermoscopic examination (Fig.2) revealed, as the main feature, alveolar appearance, numerous globular elements with greater prominence of sulci. The dominance of blue colour was the following striking feature with different shadows of the light blue, indigo blue and dark bluish-black colour. In the right upper part of the lesion dark-bluish and whitish pigmentation resembled blue-white veil. The light brown colour made peripheral rim of the lesion, with purplish spot noted only at the right, top rim of the lesion. The clue for vascular lesion, typical, sharply demarcated, dark bluish-black and black round lacunas, were seen only a few in number at the periphery of the lesion.

Histologically, (Fig.3) the lesion was characterized by hyperplastic epidermis showing the hyperkeratosis and irregular acanthosis. The underlying dermis was occupied by numerous, dilated vessels, some located between lengthened dermal papillae. Numerous, smaller vessels, mainly capillary-type, were extending below them in the reticular dermis.

Conclusion

The diagnosis of VH is generally made on the histopathological examination. This report, showed that VH has distinct, differential dermoscopic features and dermoscopy can provide definitive diagnosis of this rare, vascular tumor.

In conclusion, diagnosis of verrucous hemangioma should be considered in dark papule/nodule or plaque/band, with a hyperkeratotic appearance, located unilaterally, on the lower extremities, especially in those lesions which dermoscopically have alveolar appearance surrounded by dark, bluish-black lacunas.

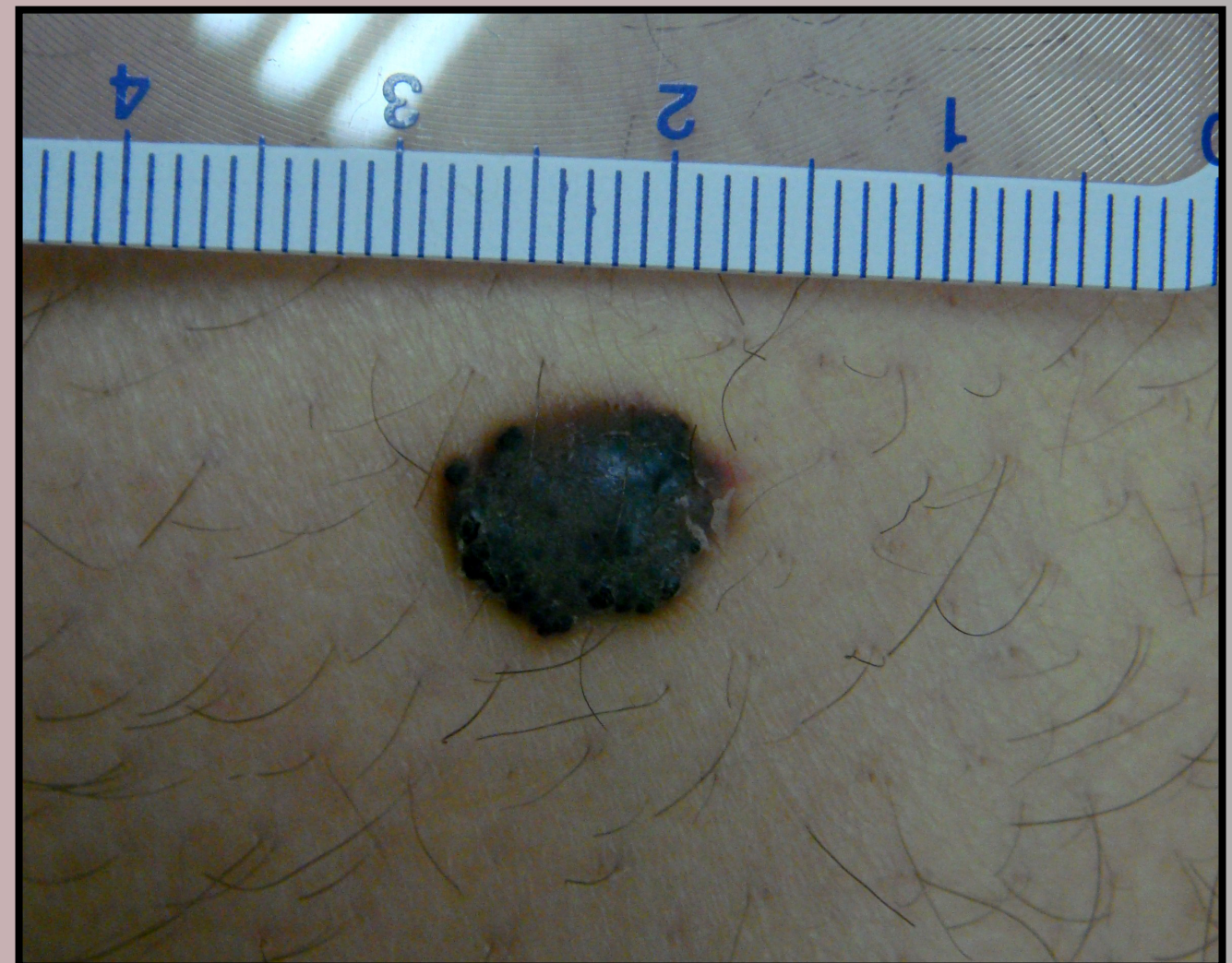


Figure 1.

Case report

A 14-year-old, Caucasian girl was referred to Dermatology Clinic of the University of Belgrade for the evaluation of an asymptomatic, pigmented lesion on her right leg that she has been having since birth. The lesion has been enlarging slowly, simultaneously with the growth of her body. Trauma of the lesion and development of the surrounding erythema caused the patient to seek medical advice for the first time at this stage of lesion. The personal and family histories were unremarkable.

Clinically, (Fig.1) the lesion was asymmetric oval-shaped, raised plaque, with irregular, well-defined borders and 12 mm in diameter. The dark bluish-black pigmentation of the plaque was irregularly distributed and nonhomogenous. Palpation showed firm skin texture with rough and hyperkeratotic surface along with moderate desquamation. The lesion was not compressible and did not blanch under the pressure. No pulsation was detected by palpation of the lesion. Full physical examination showed no other abnormality.

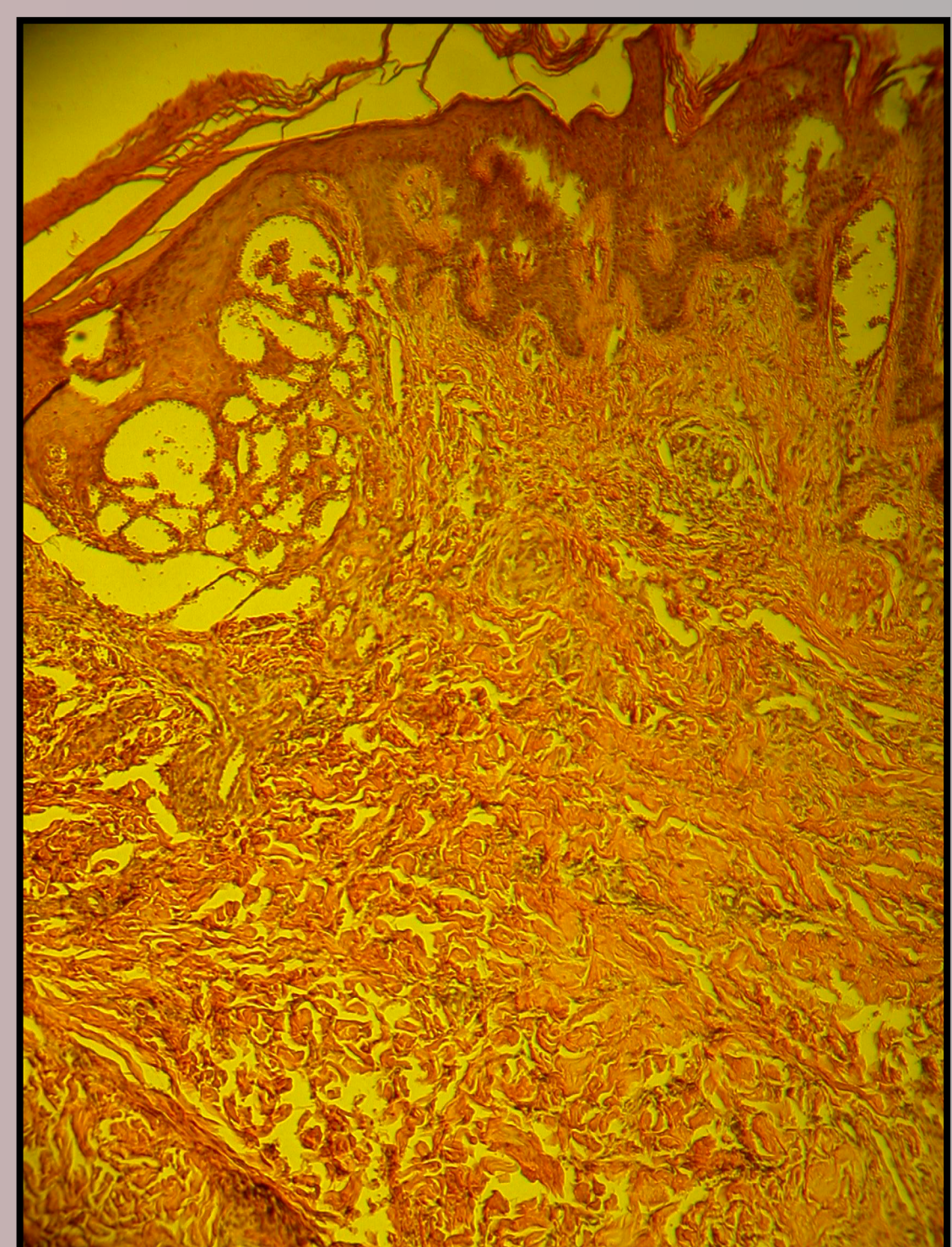


Figure 3.

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