



Classical presentation of Hobnail hemangioma in a child

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ABSTRACT

Hobnail hemangioma, also termed as targetoid hemosiderotic hemangioma (THH) is a benign condition with cutaneous vascular lesion. We report a 6 years old male child who presented with an asymptomatic erythematous to violaceous papule with surrounding erythematous ring with a few pale areas over lower back since 3 years. On clinicopathological correlation, a diagnosis of hobnail hemangioma was made.

Key words: *Hobnails haemangioma, Targetoid haemosiderotichaemangioma, Lymphatic malformation*

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INTRODUCTION

Hobnail hemangioma or targetoid hemosiderotic hemangiomas are small benign vascular tumors that arise in the superficial and mid-dermis.^[1] On histology, apart from showing characteristic matchstick like pattern of endothelial cells with a biphasic growth pattern that has dilated vascular spaces in the papillary dermis and narrow vascular structures in deeper dermis along with inflammatory infiltrate, deposits of hemosiderin and fibrosis.^[2, 3, 4] Hobnail hemangiomas have an antigenic profile that exhibits similarity to normal lymphatic channels that supports the hypothesis that hobnail hemangiomas are lymphangiomas.^[3]

Here, we present to you a classical case of hobnail hemangioma in a 6-years-old male child.

CASE REPORT

A 6-years-old male child presented with an asymptomatic erythematous to violaceous patch over his lower back since 3 years with an emerging violaceous growth in the centre over the same patch for last 2 months. There was no history of any trauma. Examination revealed violaceous papule with surrounding erythematous ring with a few pale areas [Figure 1]. There was no family history of similar complaints and no other cutaneous and systemic findings in the patient. Skin biopsy showed numerous dilated and thin-walled blood vessels in the papillary and superficial reticular dermis [Figure 2a]. The vessels are lined by a single layer of bland endothelial cells showing hobnail appearance at places [Figure 2b]. Perls stain was done to demonstrate hemosiderin deposits in macrophages [Figure 3]. Epidermis appeared largely unremarkable. On the basis of clinical and histopathological correlation, a diagnosis of hobnail hemangioma was made. Hemorrhage resulting from vascular proliferation explains the targetoid appearance of the lesion.

DISCUSSION

Hobnail hemangioma is a benign cutaneous vascular lesion. It is more commonly seen in females than in males. It is commonly encountered in middle age. Trunk and extremities are the most common sites of presentation. It classically presents as a solitary targetoid-appearing annular lesion of less than 1 cm that constitutes of an ecchymotic ring surrounding a violaceous papule. Lesions may not always be classical, it may also present without a halo. This pertains to different stages of evolution and resolution, due to underlying hormonal changes or trauma.^[2]

Hobnail hemangioma commonly mimics infantile hemangioma, Kaposi sarcoma, melanocytic lesion, insect bite reaction, erythema multiforme, melanocytic lesions, solitary neurofibroma, solitary circumscribed neuroma, fibroepithelial polyp and dermatofibroma. Histological differential diagnoses include angiosarcoma, lymphangioma, Kaposi's sarcoma and epithelioid hemangioma.

Atypical clinical and histopathological variants have been described with atypical dermoscopic findings mimicking seborrheic keratosis and dermatofibroma. [3, 5, 6]

Hobnail hemangioma has been categorized as a lymphatic malformation according to recent studies as D2-40 or podoplanin which is a lymphatic cell marker is strongly positive according to many case series. Thus, it can be concluded that hobnail hemangioma is a lymphatic malformation. [2, 5]

It usually requires no treatment; simple excision can be done with no chances of further recurrence. [1, 3]

Figure 1. Clinical picture showing hobnail haemangioma over the back



Figure 2a. Histopathological features of hobnail haemangioma showing numerous dilated and thin walled blood vessels in papillary and superficial reticular dermis (H & E 10X 40)

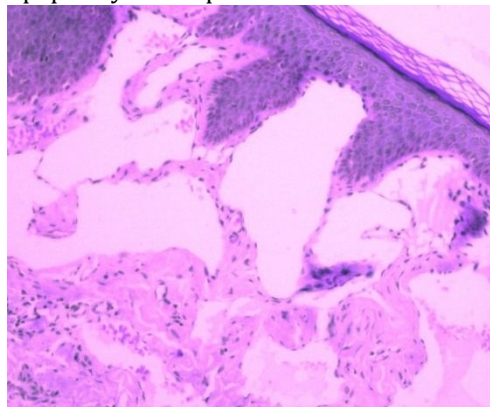


Figure 2b. The vessels lined by a single layer of bland endothelial cells showing hobnail appearance at places (H & E 10X100)

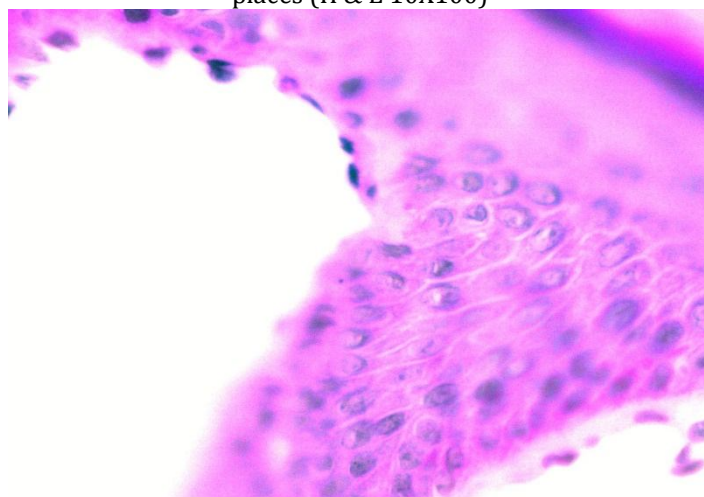
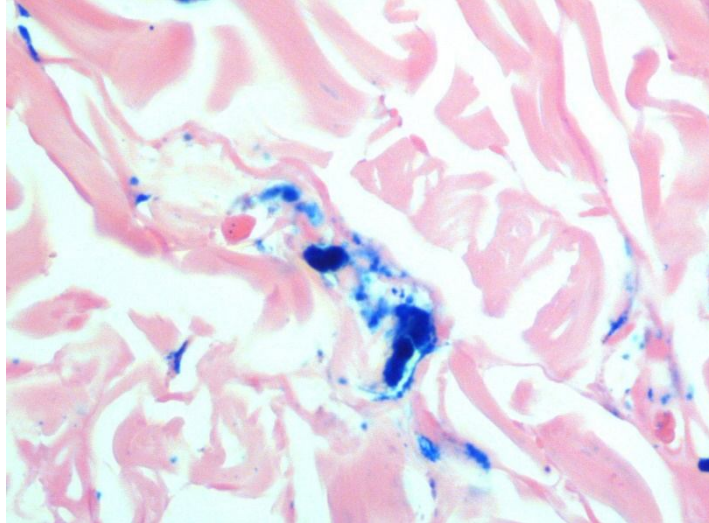


Figure 3. Perls stain showing demonstrate hemosiderin deposits in macrophages (10X40)



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