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BECKERS NEVUS AT AN UNUSUAL SITE- A CASE REPORT

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ABSTRACT

Becker's nevus is a common pigmented smooth muscle hamartoma that develops during adolescence and occurs primarily in young males. The nevus is characterized by hypertrichosis and increased pigmentation and is usually located unilaterally over upper half of the trunk and upper arms. We describe a patient with a Becker's nevus at an unusual site and with absence of hypertrichosis.

INTRODUCTION

Becker's nevus also known as Becker's melanosis, pigmented hairy epidermal nevus is an acquired and persistent asymmetrical area of skin pigmentation. The nevus sometimes shows evidence of increased androgen sensitivity, and co-localization with other developmental anomalies. Cutaneous mosaicism has been suggested as developmental aetiology but sporadic cases have been reported.

CASE REPORT

A 27 year old male presented to the Skin OPD with complaints of dark coloured, asymptomatic skin lesion on the left knee of 6 years duration. Initially, it began as a small dark patch which over time increased in size and number. Many patches coalesced together, along which absence of growth of hair was noticed. On clinical examination, a large pigmented patch with well-defined borders was noticed on the left knee, extending towards the shin. Multiple small pigmented macules were seen around the primary patch, few coalescing to give a geographic appearance [Fig 1]. Absence of terminal hair in the centre of the patch was noted and presence of the same was seen at the periphery of the patch and the surrounding normal appearing skin. Palms, soles, nails, scalp and the oral

mucosa were normal. General and systemic examination was normal. Routine investigations were done & were within normal limits. Histopathology revealed hyperkeratosis and acanthosis of epidermis with regular elongated and flattened rete pegs with increased pigmentation in the basal cell layer overlying fibrocollagenous dermis [Fig 2]. A few pigment laden macrophages in superficial dermis and hypertrophic smooth muscle bundles in deeper dermis were noted, thus confirming the diagnosis of Becker's melanosis.

DISCUSSION

Becker nevus is relatively a common smooth muscle hamartoma [1] with brown-black hyperpigmentation and hypertrichosis. It usually affects young males [2] and is first noticed in childhood or in adolescent age. It is rarely seen congenitally. It has a predilection for the upper half of the trunk and proximal upper extremity. Rarely, it is noticed on the face and the extremities [3]. Usually it starts as an irregularly shaped macule which slowly expands to several centimetres, new macules develops beyond the margins and coalesce with it giving a geographic contour. Hypertrichosis is a common feature and has reported to be absent in extremities [4].



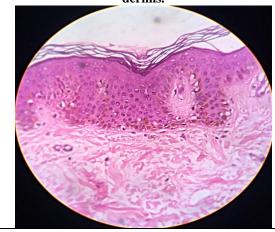
Numerous associations and syndromic forms have been reported. Histological changes of well-developed lesions show hyperkeratosis, acanthosis and papillomatosis, with hyperplasia of hair follicles and sebaceous glands. The elongated rete ridges are marked by a flat base. The basal and suprabasal epidermal keratinocytes are heavily pigmented, and melanocyte density is variably reported as increased [5], with a few melanophages in the upper dermis. The dermis is thickened, and contains numerous,

but often inconspicuous, bundles of smooth muscle fibres [6]. It is usually self-limited and persist for life long. No topical or systemic medications have been reported to be beneficial. Treatment with Q-switched ruby laser [7], 694-nm long pulsed ruby laser [8], Er: YAG laser and Q-switched Nd: YAG laser [9] have been reported to be beneficial in decreasing the pigmention and the hypertrichosis. Camouflage [10] usage is helpful in paediatric age group.

Figure 1. Clinical photograph of left knee, showing a pigmented patch with devoid of hairs at the center and with numerous macules around it giving it a geographic contour.



Figure 2. Histological picture (High power- 400 x) showing hyperkeratosis and acanthosis with increased pigmentation of basal cell layer, with flattening of the base of rete pegs and with a few melanophages in superficial dermis.



CONCLUSION

The presence of Becker's nevi on the lower limbs is unusual, and hypertrichosis is not always a definitive feature. This should be borne in mind when evaluating for pigmented lesions on lower legs.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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