



BECKER'S NEVUS, IT'S RARE MANIFESTATIONS- A STUDY ON CASE SERIES

Dermatology

**Keerthana
Bhaskar P**

Junior Resident, Department of Dermatology, Venereology & Leprosy, Sree Balaji Medical College & Hospital, Bharath University, Chennai 600044, Tamil Nadu, India.

Jayakar Thomas*

HOD & Professor, Department of Dermatology, Venereology & Leprosy, Sree Balaji Medical College & Hospital, Bharath University, Chennai 600044, Tamil Nadu, India.
*Corresponding Author

ABSTRACT

Becker's nevus is an acquired, pigmentary disorder of the skin which is seen in adolescent males with the common site being shoulder, chest and scapular region. We report a three case series of Becker's Nevus with varied presentations in in two female patients and one male patient.

KEYWORDS

Becker's nevus, rare manifestations, Becker's nevus in female

INTRODUCTION:

Becker's nevus is an acquired, pigmentary disorder of the skin which is seen in adolescent males with the common site being shoulder, chest and scapular region. It is a Cutaneous smooth muscle hamartoma, seen as a unilateral, pigmented, hypertrichotic patch with irregularly demarcated borders on the shoulder and trunk[2]. We report a three case series of Becker's nevus in two female patients and one male patient.

CASE REPORT 1:

A 33-year-old female came to our skin OPD with complaints of a pigmented lesion on the left upper limb for the past 10 years. Progressively increased in size to involve the arm as well. Patient was otherwise asymptomatic. Local examination: a single pigmented patch with irregular borders over the extensor aspect of left arm and forearm.

CASE REPORT 2:

A 47-year-old female who has been following up for dermatophytosis also complaints of a dark coloured lesion over back from the past 20 years. It is asymptomatic. On examination, Pigmented patch present over the left upper back with irregular borders.

CASE REPORT 3:

A 28-year-old male presented to the Skin OPD with complaints of dark coloured, asymptomatic skin lesion over the left knee from past 6 years. 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. There was 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 surrounding skin was normal.

In all the three case reports, patients did not show any unilateral breast hypoplasia, the systemic findings and routine investigations done were normal and skin biopsy was done where the features were consistent with that of Becker's nevus showing hyperkeratosis, acanthosis of epidermis with regular elongation of rete ridges and increased pigmentation in basal cell layer.

DISCUSSION:

Becker's nevus is also known as Becker's melanosis, pigmented hairy epidermal nevus. It was first described by Becker in late 1940s in two young men with hypermelanosis and hypertrichosis. Becker's nevus is a relatively common smooth muscle hamartoma with brown to black pigmentation and hypertrichosis seen in young males. It is commonly seen over the upper trunk and shoulder in a unilateral distribution and rarely on the face and extremities. Exact pathogenesis of Becker's nevus is unknown, cutaneous mosaicism is thought to play a role[1]. Peri-pubertal development, acneiform lesions within the patch, male predilection and increased cutaneous androgen receptors indicate that androgens might play a role in Becker's nevus. It starts as an area of irregular macular pigmentation which spreads to a diameter of several

centimetres. New macules may develop at the periphery of the lesion and may coalesce with it, giving it a geographic contour. Hypertrichosis is a common feature and has been reported to be absent in the extremities.

Dermatopathology of the epidermis shows acanthosis, with irregular elongation of the rete ridges which have a tendency to fuse. The basal cell layer will show increased pigmentation with melanophages in the upper dermis. If it is associated with a smooth muscle hamartoma, irregularly arranged, thick bundles of smooth muscle can be seen in the dermis.

Differential diagnosis include Mc Cune Albright Syndrome, Post Inflammatory Hyperpigmentation, Café au lait patch Treatment of Becker's Nevus includes Topical and systemic medications are of no significance. Lasers like Q-switched ruby laser, Nd:YAG laser, Er:YAG laser can be of some benefit in reducing the pigmentation and hypertrichosis. Cosmetic camouflage is a very useful mode of treatment

CONCLUSION:

Becker's nevus commonly presents in young adolescent males over the chest and shoulder, its occurrence in a female patient is a rare manifestation and occurring without hypertrichosis in male adds to its rarity and shows that it is not always a definitive feature. This should be borne in mind as diagnostic possibility of pigmented lesions in atypical sites, if history and clinical features are suggestive.

Figure 1

Clinical photographs showing Hyperpigmented patch absence of hair over left knee in male patient (A), hyperpigmented patch with irregular borders over left arm and forearm in a female patient(B), and hyperpigmented patch with irregular borders over upper back in another female patient©.

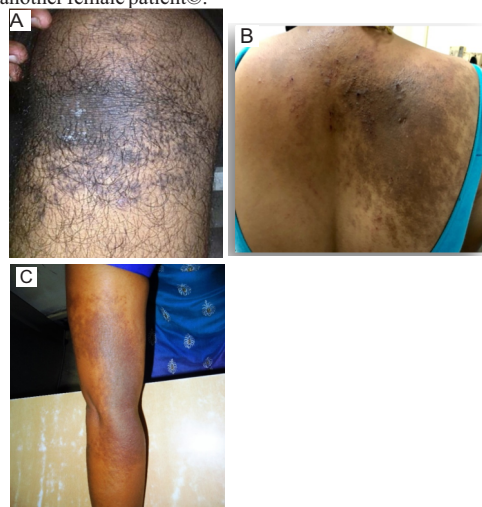
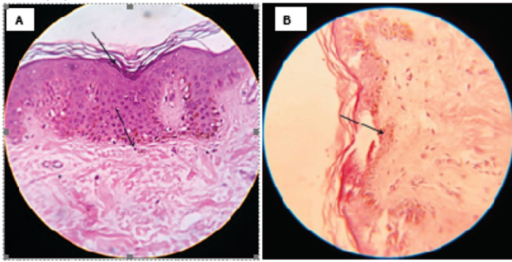


Figure 2

Photomicrograph showing Hyperkeratosis and acanthosis of the epidermis in high power(A) and increased pigmentation in the basal cell layer in low power with few hypertrophic smooth muscle bundles in dermis(B)

**REFERENCES:**

1. Jayakar Thomas et al. /M.beckers nevus at an unusual site- a case report. International Journal Of Advances In Case Reports, 2016;3(12):454-455.
2. Tymen R. Naevustardif de Becker: A propos d'uneserie de 100 observations. Ann DermatolVenereol. 1981;108:41-6.
3. Copeman pm, jones ew. Pigmented hairy epidermal nevus (Becker). Archives of dermatology. 1965 Sep 1;92(3):249-51.
4. Tedeschi A, Dall'Oglio F, Micali G, Schwartz RA, Janniger CK. Corrective camouflage in pediatric dermatology. Cutis. 2007 Feb;79(2):110-2.