

CASE REPORT

BILATERALLY ASYMMETRICAL BECKER'S NEVUS

Zarnab Zainab¹, Naveed Akhtar Malik¹, Shanza Obaid¹, Maimoona Mumtaz¹, Kanza Aftab¹, Saqib Malik², Alia Pervaiz³, Zainab Syed²

¹Department of Dermatology, Pak Emirates Military Hospital, Rawalpindi, ²Department of Medicine, Ayub Medical College, Abbottabad, ³COMSAT Islamabad-Pakistan

Becker's nevus is a main epidermal hypermelanotic condition that usually presents in adolescence, though childhood cases are seen less commonly. Congenital cases have been rarely reported. Nevus is usually unilateral having increased pigmentation and is characterized by hypertrichosis. It usually presents as a patch on back, proximal upper extremities, arms and upper trunk. Becker's Nevus presenting as bilaterally asymmetrical patch is rare. A case of 23 year's old male with bilateral hyperpigmented patch over the back has been reported. The histological exams established the clinical hypothesis of Becker's Nevus.

Keywords: Becker's Nevus; Bilateral; Asymmetrical

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INTRODUCTION

Becker's Nevus is a localized hyperpigmented macule with definite and asymmetrical borders, enclosed most of the time by terminals.¹ It is commonly presented as a single asymptomatic unilateral lesion predominately on the anterior trunk or on the scapular region^{1–3} but it can be found on other parts of body⁴. After development, the lesion may enlarge slowly for a year or two, but then remains stable inside. Colour may fade with time but hypertrichosis is persistent. Becker's Nevus with atypical presentation that is bilateral symmetrical or asymmetrical Becker's Nevus covering the back, upper limbs or/ and the chest is rarely reported in the literature and is mostly present in the Indian population.

A study in 1981 was conducted and survey of nearly 20,000 French male aged from 17–26 years was carried out. In this study 1000 subjects were found to have Becker's Nevus so prevalence of 0.5 percent was recorded. Another study was recorded in the outpatient dermatology department in Hazrat-E-Rasool hospital in Iran capital Tehran in which they examine 22,600 patients and reported a prevalence of 0.2 percent. The nevus sometimes shows indication of enlarged androgen sensitivity and co-localization with other evolving anomalies. Becker's Nevus is mostly found in male. Female with Becker's Nevus usually present with no hypetrichoses and with less hyperpigmentation because of its androgen dependency.⁵

CASE REPORT

A 23 year's old male presented in the skin OPD with an indurated plaque over the left arm, which on biopsy was found to be a cutaneous leishmaniasis. He was admitted in the ward for this and was on treatment. Accidentally while doing general physical

examination, he was found to have two hyperpigmented patches, one present on the left side of the shoulder involving suprascapular region extending towards the arm and other over the right side of flank. Initially it began as a small dark macule which over time increased in size. Both the patches had irregular borders. Multiple small pigmented macules were also seen around the primary patch, few were coalescing with it. Palms soles, nails, scalps and oral mucosa were normal. General physical and systemic examination was normal. Routine investigations were done and were within normal range. Histopathological study revealed hyperkeratosis and acanthosis. There is regular elongation of rete ridges. The epidermal keratinocytes basal and supra-basal parts are pigmented and melanocyte density is amplified with pigmentary incontinence.



Figure-1: Clinical photograph showing back with bilaterally asymmetrical pigmented patches devoid of hair and with numerous macules around it

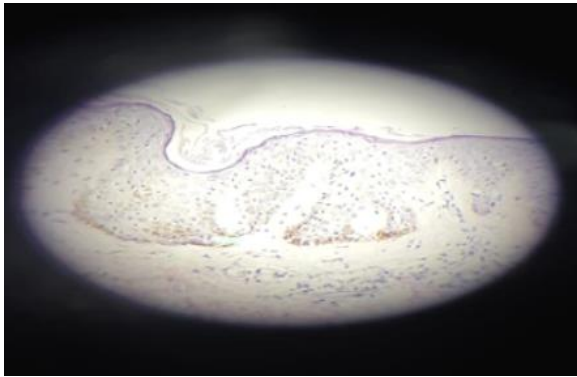


Figure-2: Histopathological report shows elongation of rete ridges with amplified melanocytes in the basal layer

DISCUSSION

Becker's Nevus presents with varied clinical presentations. Most often it is acquired however its mutable penetrance has been assumed as autosomal dominant mode of inheritance. Becker's Nevus is more shared in males by a male to female ratio 5:1.⁶ It is known that there is disturbance in the androgen receptor activity in Becker's Nevus is evidenced by increased androgen receptor density.⁷ Associated with various non-Cutaneous anomalies such as unilateral hypoplasia of the breast, localized lipoatrophy, ipsilateral limb shortening, pectus carinatum, spina bifida, scoliosis, aplasia of the ipsilateral pectoralis major muscle, congenital adrenal hyperplasia, and an accessory scrotum have also been reported to be associated with Becker's Nevus.⁸ When Becker's Nevus is associated with unilateral breast hypoplasia or other Cutaneous, skeletal or muscular defects, it is term as Becker's Nevus syndrome.⁹ It is a benign with only a rare malignant cases reported in the medical research.¹⁰ The diagnosis of a well-developed Becker's Nevus is straight forward. In early lesion, typical site, geographical distribution and age at the time of onset help to differentiate Becker's Nevus from whorled and nevoid hypermelanosis from cafe-au lait macule. Another differential is the acquired smooth muscle hamartoma which has similar clinical histopathological features, but in different proportions, with more smooth muscle component and less pigmentation.¹¹ Main concern of patients

with Becker's is the cosmetic appearance. The therapeutic modalities are limited. Laser therapies in vogue include erbium yttrium garnet (Er YAG) laser and Q-switched laser¹², combination of long-pulsed 1064-nm (Nd YAG) laser and (1550-nm) (Er-doped) non-ablative fractional laser, long-pulsed alexandrite laser (755-nm). Advice on cosmetic camouflage can also be helpful.¹³⁻¹⁵

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Address for Correspondence:

Zarnab Zainab, Department of Dermatology, Pak Emirates Military Hospital, Rawalpindi-Pakistan

Email: doctorzarnab117@gmail.com