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CASE REPORT

When Skin Talks Through Teeth: Dental Findings in a Case of Becker's Nevus: a Case Report

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ABSTRACT

Becker's nevus is a cutaneous hamartoma characterized by a unilateral, hyperpigmented patch, often with hypertrichosis, typically appearing during adolescence. While primarily a dermatological condition, its association with various developmental anomalies, including musculoskeletal and maxillofacial abnormalities, highlights potential implications for dental and craniofacial health. Becker's nevus syndrome, a variant involving skeletal or soft tissue abnormalities, may present with facial asymmetry, malocclusion, or dental developmental disturbances. Dental practitioners should be aware of these associations to facilitate early diagnosis, interdisciplinary management, and appropriate treatment planning. This case report reviews the clinical features of Becker's nevus and explores its relevance in dental practice, emphasizing the importance of comprehensive evaluation in affected individuals.

Keywords: Becker's, Musculoskeletal, Cutaneous

1 INTRODUCTION

Becker's nevus (BN), or Becker melanosis, is a benign cutaneous hamartoma characterized by a hyperpigmented, often hypertrichotic patch, typically developing during adolescence. First described by Samuel William Becker in 1949[1], Becker's nevus has since been recognized as a condition with a clear male predominance and a suspected hormonal influence in its pathogenesis. The lesion most commonly affects the upper trunk and shoulders but can appear in other regions. Although usually an isolated dermatologic finding, Becker's nevus can be associated with musculoskeletal and breast abnormalities in a condition known as Becker nevus syndrome (BNS)[2]. Becker's nevus is primarily dermatological, there have been rare reports of craniofacial involvement, including dental anomalies such as malocclusion, delayed eruption, and facial asymmetry, particularly in cases of Becker nevus syndrome. These anomalies likely reflect underlying mesodermal dysregulation during embryogenesis. Therefore, multidisciplinary evaluation, including dental or orthodontic assessment, may be indicated in selected patients with suspected syndromic features[3].

Herein, we present a case of a typical Becker's nevus in an adolescent male and discuss the clinical presentation along with oral manifestations , differential diagnosis, histopathology, management strategies, supplemented by a review of the literature (Table. 1).

2 CASE REPORT

A 12 year old male patient reported to the department of Pediatric and Preventive dentistry, University College of Medical Sciences, GTB hospital with the chief complaint of pain in his right upper back tooth region since 30 days. The patient's past history was notable for a well defined asymptomatic

hyperpigmented patch on his right thigh region (Fig. 1**a**), which was diagnosed as becker's nevus. On intraoral examination , dental caries was seen in relation to right and left upper first permanent molars, grossly decayed lower left permanent molar, presence of crowding in his lower anterior teeth, hyperpigmented gingiva in relation to upper and lower anterior region, palatal petechiae noted at the junction of hard and soft palate (Fig. 1**b,c**). Dental management including root canal treatment on right upper first permanent molar was done (Fig. 1**d**). Additionally application of pit and fissure sealant in right lower first permanent molar and oral prophylaxis was performed (Fig. 1**e**). The patient was asked to recall after 1 month and 3 months.

Table 1

Author(s)	Year	Title	Key Findings
Happle R. *et al*[11]	1997	Becker nevus syndrome	Associates Becker's nevus with cutaneous and extracutaneous disorders (breast hypoplasia, scoliosis, segmental odontomaxillary, supenumerary nipple, and spina bifida).
Alfaro A *et al*[12]	2007	Becker Nevus Syndrome	The lesion was situated over the right scapular region and extended onto the right shoulder and arm with a hairy surface and was associated with hypoplasia of the ipsilateral breast and scoliosis.
Baik WK *et al*[13]	**2018**	**Comprehensive Treatment of a Skeletal Class III Growing Patient with Alveolar Bone Hypertrophy in the Anterior Mandible Associated with Becker's Nevus Syndrome: and Malocclusion**	Becker's nevus on the right cheek, chin, and upper neck with alveolar bone hypertrophy in the anterior mandible, which led to an anterior crossbite and severe canting of the mandibular anterior teeth.
Alhuqayl A *et al*[14]	2019	Multiple bilateral Becker's nevus in a Saudi female: a rare presentation	Asymptomatic tan to brownish pigmented patches over both sides of her upper back and chest extending to both breasts.
Brzezinski. P *et al*[15]	2022	Becker ' s nevus syndrome: A new case series Becker's nevus syndrome: A new case series	Ipsilateral breast gland hypoplasia(Case 1). Bilateral breast gland hypoplasia and keratosis pilaris only in the left antecubital region and with scoliosis(Case 2). Two Becker's nevi in the left and right hip area associated with hypoplasia of the third canine tooth on the right side and with scoliosis (Case 3).



Fig. 1: a. Well defined hyperpigmented patch noted on the right thigh region. b. Hyperpigmented gingiva. c. Preoperative mandibular teeth showing calculus and lower anterior crowding. d. Maxillary teeth with carious left permanent molar and root canal treated right permanent molar; palatal petechiae noted at the junction of hard and soft palate. e. Post operative clinical photo after oral prophylaxis

3 DISCUSSION

Becker's nevus typically arises during adolescence, aligning with hormonal changes during puberty, and shows a strong male predominance with a male-to-female ratio of approximately 2.3:1[4, 5]. Becker melanosis has an estimated prevalence of 0.5% among men. The lesion usually presents during puberty, but rarely, cases of Becker melanosis presenting at birth or early childhood have been reported; familial occurrence of Becker melanosis has been reported. Some studies have shown a higher incidence among Black individuals[6]. The pathogenesis is thought to be androgen-mediated. Studies have demonstrated an increased density of androgen receptors in lesional skin compared to adjacent unaffected skin[7]. This may explain both the hypertrichosis and the pubertal onset of BN. BN typically appears as a unilateral, hyperpigmented patch, often with irregular borders and associated hypertrichosis. In our case, the lesion was unilateral, hyperpigmented with irregular borders in the thigh region. Common locations include the chest, scapular region, upper arms, and sometimes the face or legs. The lesion is usually asymptomatic, though some patients report mild pruritus during early stages.

While BN is usually an isolated skin finding, in Becker nevus syndrome (BNS), the nevus is associated with hypoplasia of the breast, pectoral muscles, or underlying skeletal abnormalities[3]. Our case presented with isolated skin finding in the thigh region with mild pruritis. Histopathological examination of BN typically reveals acanthosis, elongation of rete ridges, basal layer hyperpigmentation, and smooth muscle hyperplasia . The number of melanocytes is not increased, distinguishing it from congenital melanocytic nevi. immunohistochemical studies have shown increased expression of some markers like epidermal Ki-67, melan-A, and keratin 15 in the lesional and perilesional skin compared to normal skin[8]. Differential diagnosis includes Congenital melanocytic nevus – present at birth, often darker and thicker; Café-au-lait macule – uniformly light brown without hair growth; pigmented epidermal nevus – often verrucous with a linear distribution; nevus spilus – characterized by speckled pigmentation on a lighter background and post-inflammatory hyperpigmentation – history of preceding trauma or inflammation. Management is primarily conservative, with reassurance about the benign and non-progressive nature of BN. Cosmetic concerns may prompt intervention. Options include: Laser therapy – Q-switched Nd:YAG and ruby lasers may help reduce pigmentation, while long-pulsed alexandrite and diode lasers can target hair[9, 10]. Topical agents – Hydroquinone and tretinoin may be tried but have limited efficacy. Surgical excision – Generally not recommended due to lesion size and risk of scarring. The psychological impact, particularly in adolescents, should not be underestimated, and counseling should be offered when necessary.

4 CONCLUSION

Becker's nevus typically presents with minimal direct dental implications; however, it may be associated with underlying musculoskeletal anomalies, such as hemihypertrophy or scoliosis, which can influence craniofacial development and occlusion. However, there is insufficient literature on dental complications associated with beckers nevus , a thorough evaluation for facial asymmetry or related syndromic features is essential. Multidisciplinary coordination ensures accurate diagnosis and optimal treatment planning[3].

References

1. Becker SW. Concurrent melanosis and hypertrichosis in distribution of nevus unius lateris. *Archives of Dermatology*. 1949; 60 (2) :155-160 . Available from: https://doi.org/10.1001/archderm.1949.01530020023005
2. Dasegowda SB, Basavaraj G, Nischal K, Swaroop M, Umashankar N, Swamy SS. Becker′s nevus syndrome. *Indian Journal of Dermatology*. 2014; 59 (4) :421 . Available from: https://doi.org/10.4103/0019-5154.135530
3. Welsch MJ, Stein SL. A Syndrome of Hemimaxillary Enlargement, Asymmetry of the Face, Tooth Abnormalities, and Skin Findings (HATS). *Pediatric Dermatology*. 2004; 21 (4) :448-451 . Available from: https://doi.org/10.1111/j.0736-8046.2004.21405.x
4. Kim JH, Kim YC, Lew BL, Sim WY, Kim IH. Expression of androgen receptor in Becker's nevus. *Journal of Dermatology*. 2005;32(8):602–6.
5. Rasi A, Berenji Ardestani H, Tabaie SM. Hypertrichosis Is Not so Prevalent in Becker's Nevus: Analysis of 47 Cases. *ISRN Dermatology*. 2014; 2014 :1-4 . Available from: https://doi.org/10.1155/2014/953747
6. Patrizi A, Medri M, Raone B, Bianchi F, Aprile S, Neri I. Clinical Characteristics of Becker's Nevus in Children: Report of 118 Cases from Italy. *Pediatric Dermatology*. 2012; 29 (5) :571-574 . Available from: https://doi.org/10.1111/j.1525-1470.2012.01734.x
7. Patel P, Malik K, Khachemoune A. Sebaceus and Becker's Nevus: Overview of Their Presentation, Pathogenesis, Associations, and Treatment. *American Journal of Clinical Dermatology*. 2015; 16 (3) :197-204 . Available from: https://doi.org/10.1007/s40257-015-0123-y
8. AlGhamdi KM, AlKhalifah AI, AlSheikh AM, AlSaif FM. Clinicopathologic profile of Becker's melanosis with atypical features. *Journal of Drugs in Dermatology*. 2009;8(8):745-8. https://pubmed.ncbi.nlm.nih.gov/19663112/
9. Al-Saif F, Al-Mekhadab E, Al-Saif H. Efficacy and safety of short-pulse erbium: Yttrium aluminum garnet laser treatment of Becker's nevus in Saudi patients: A pilot study. *International Journal of Health Sciences*(Qassim). 2017;11(3):14-7.
10. Momen S, Mallipeddi R, Al-Niaimi F. The use of lasers in Becker's naevus: An evidence-based review. *Journal of Cosmetic and Laser Therapy*. 2016; 18 (4) :188-192 . Available from: https://doi.org/10.3109/14764172.2015.1114647
11. Happle R, Koopman RJ. Becker nevus syndrome. *American Journal of Medical Genetics*. 1997; 68 (3) :357-361 . Available from: https://doi.org/10.1002/(sici)1096-8628(19970131)68:3<357::aid-ajmg20>3.0.co;2-r
12. Alfaro A, Tórrelo A, Hernández Á, Zambrano A, Happle R. Becker Nevus Syndrome. *Actas Dermo-Sifiliográficas (English Edition)*. 2007; 98 (9) :624-626 . Available from: https://doi.org/10.1016/s1578-2190(07)70529-2
13. Baik W-K, Choi S-H. Comprehensive Treatment of a Skeletal Class III Growing Patient with Alveolar Bone Hypertrophy in the Anterior Mandible Associated with Becker's Nevus Syndrome: A Case Report. *Children*. 2021; 8 (2) :72 . Available from: https://doi.org/10.3390/children8020072
14. Alhuqayl A, Alsaif F, Alsaad A, Alali A. Multiple bilateral Becker's nevus in a Saudi female: a rare presentation. *AME Case Reports*. 2019; 3 :42-42 . Available from: https://doi.org/10.21037/acr.2019.10.01
15. Brzezinski P, Chiriac A, Bimbi C, Martini L, Borowska K. Becker's nevus syndrome: A new case series. *Our Dermatology Online*. 2022; 13 (2) :193-196 . Available from: https://doi.org/10.7241/ourd.20222.19