

UC Davis

Dermatology Online Journal

Title

Acne isolated within a Becker nevus of a 14 year-old girl

Permalink

<https://escholarship.org/uc/item/4jb09198>

Journal

Dermatology Online Journal, 21(8)

Authors

Juhl, Mark
Pappo, Eden
Bain, Michelle

Publication Date

2015

DOI

10.5070/D3218028440

Copyright Information

Copyright 2015 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at <https://creativecommons.org/licenses/by-nc-nd/4.0/>

Letter

Acne isolated within a Becker nevus of a 14 year-old girl

Mark Juhl MSIV¹, Eden Pappo MD², Michelle Bain MD²

Dermatology Online Journal 21 (8): 15

¹College of Medicine, ²Department of Dermatology, University of Illinois-Chicago

Correspondence:

Mark Juhl
University of Illinois-College of Medicine
1853 W. Polk St.
Chicago, IL 60612
T:312-720-4875
F:312-996-1188

Abstract

Becker nevus (BN) is a common benign condition occurring most often in young men, much more often than in women. Acne isolated within a BN is a rare phenomenon hypothesized to occur, at least in part, due to increased androgen sensitivity within the nevus. We present a rare case of papular acne within a BN of a 14 year-old girl.

Keywords: acne; Becker nevus; androgen sensitivity; androgen receptor

Introduction

Becker nevus (BN) is a common benign nevus present in 0.5% of young men and most often first noticed around puberty [1]. Occurring five times more often in males than in females [1], BN typically begins as a sudden onset of hyperpigmentation on the shoulder or arm with slow peripheral extension of the pigmentation [2]. Commonly known to be hypertrichotic, it has been noted, as in our patient, that the hypertrichosis may not be evident in early BN [1, 2]. These nevi usually have a uniform color varying from tan to dark brown except at the advancing margin where irregular macules of varying size are seen [2]. BN is generally not biopsied as a clinical diagnosis is often sufficient [2].

We present a case of truncal acne isolated to a BN in a 14 year-old girl.

Case synopsis

A fourteen-year-old girl presented to our clinic with a three-year history of a gradually enlarging dark spot on her chest. The patient had no significant past medical history and was otherwise asymptomatic. The patient stated that the macule was originally dime sized and gradually enlarged to cover her right chest. On physical exam a 17x14cm hyperpigmented dark brown and irregularly-shaped patch extending from the midline to the right chest with an outer edge displaying hyperpigmented speckling

was observed. Although hair was not noted, large sebaceous follicles were seen within the nevus. In the midline of the chest, isolated within the hyperpigmented patch, were scattered erythematous and hyperpigmented papules (Figure 1a,b). The findings were consistent with a benign Becker Nevus and acne. The patient was provided reassurance regarding the nevus and instructed to use benzoyl peroxide 5% wash for her body. Erythromycin/benzoyl peroxide combination gel was prescribed for the acne lesions.



Figure 1. (a and b): Becker's nevus displaying hyperpigmented papules representing acne, which were absent elsewhere.

Discussion

Acne within a BN has been reported 6 times previously [1,3]. All reported cases have occurred in males aged 16 to 25, with no reported cases in females [1-3]. These cases, in addition to our own, had acne that was either confined primarily to the BN or more severe within the BN [1-3]. Based on this finding, the common hypertrichosis, and the excess number of androgen receptors, it has been hypothesized that BN are mediated by androgens [3,4]. Although hypertrichosis was not noted in our patient, increased androgen sensitivity was suspected owing to the presence of enlarged sebaceous follicles. Furthermore, it has been noted that acne within BN can be difficult to treat and can recur [1,3].

Table 1. Reported Cases of Acne in a Becker's Nevus

Case	Age	Sex	Acne	Isolated in BN	Location BN	Reference
1	20	Male	pustular/cystic	N/R	left chest	2
2	21	Male	acne vulgaris	No	right chest	2
3	19	Male	papular	N/R	left deltoid	2
4	16	Male	N/R	Yes, on trunk	right chest	4
5	25	Male	pustular/cystic	No	back	3
6	18	Male	papular	N/R	left chest	1
7	14	Female	papular	Yes, on the chest	right chest	our case

In one case, an eighteen-month course of minocycline cleared the patient's acne from the face and chest but the acne persisted within BN. Escalation to the use of isotretinoin eventually cleared these lesions [3]. In another two cases the patients were prescribed topical tretinoin and erythromycin with clearance in one case and worsening in another [1,4]. Owing to the benign nature of the disease, we chose conservative initial treatment with topical erythromycin/benzoyl peroxide gel. Treatment may be escalated later.

REFERENCES

1. Agrawal S, Garg VK, Sah SP, Agarwalla A. Acne in Becker's nevus. *Int J Dermatol* 2001;40:583-5. [PMID: 11737455]
2. Burgreen BL, Ackerman AB. Acneiform lesions in Becker's nevus. *Cutis* 1978;21:617-9. [PMID: 148349]

3. Downs AM, Mehta R, Lear JT, Peachey RD. Acne in a Becker's naevus: an androgen-mediated link? *Clin Exp Dermatol* 1998;23:191-2. [PMID: 9894369]
4. Person JR, Longcope C. Becker's nevus: an androgen-mediated hyperplasia with increased androgen receptors. *J Am Acad Dermatol* 1984;10:235-8. [PMID: 6715592]