DOI: 10.7241/ourd.20143.73

NASZA DERMATOLOGIA Online
OUR DERMATOLOGY Online

THE DANCER HEEL AND THE ALPINIST HEEL (BLACK HEEL). CASE REPORTS

Piotr Brzezinski¹, Jarosław Obuszewski², Anca Chiriac^{3,4}

¹Department of Dermatology, 6th Military Support Unit, os. Ledowo 1N, 76-270 Ustka, Poland

²Pharmacy, District Hospital in Wyrzysk a Limited Liability Company, Wyrzysk, Poland

³Department of Dermatology, Nicolina Medical Center, Iasi, Romania

⁴Department of Dermato-Physiology, Apollonia University Iasi, Strada Muzicii nr 2, Iasi-700399, Romania

Source of Support:
Nil
Competing Interests:
None

Corresponding author: Dr Piotr Brzeziński <u>brzezoo77(@yahoo.com</u>

Our Dermatol Online. 2014; 5(3): 292-293

Date of submission: 02.05.2014 / acceptance: 27.06.2014

Abstract

"Black heel" (calcaneal petechiae) is a lesion affecting the back or posterolateral aspect of the heel. The cause is assumed to be trauma. The patients does not remember when the lesions occurred.

We describe two patients with classical case of black heel (talon noir) (BH).

One man were alpinist and second were dancer. The patients does not remember when the lesions occurred and they noticed it accidentally. Black heels, characterized by speckled bluish-black areas of macular pigmentation occurring at the border of the heel, have been observed in two young male.

Key words: black heel; talon noir; pigmentation; foot

Cite this article:

Brzezinski P, Obuszewski J, Chiriac A. The dancer heel and the alpinist heel (black heel). Case reports. Our Dermatol Online. 2014; 5(3):292-293.

Introduction

Black heel (BH) first described by Crissey and Peachey in 1961 (in a group of basketball players) under the name "calcaneal petechiae" has since been called "black heel," "plantar chromhidrosis," and "plantar pseudochromhidrosis." The lesion consists of a number of pinpoint- to millimeter-size dark-red to black dots lying deep in the skin. It is asymptomatic and is usually found on the medial or lateral surfaces of the heel, though lesions on the hands (tache noir) (TN) have been reported. TN has been described on the thenar eminence in weightlifters, gymnasts, golfers, tennis players, and mountain climbers [1,2].

Small linear areas of speckled bluish-black pigmentation appearing at the periphery of the heel slightly above the hyperkeratotic edge of the plantar surface. This condition occurs predominantly in young people [2]. The pigmentation is due to small lakes of intrakeratinous hemorrhage and may clinically resemble a plantar wart or may be mistaken for a malignant melanoma [3]. In the following report two cases of black heel are described.

Case Reports

Case 1

A 16-year-old boy, a dancer, was seen because of an asymptomatic area of pigmentation on his right and left heels of months' duration. On physical examination an area of speckled macular bluish-black pigmentation was seen at the outer border of the right and left heels slightly above the hyperkeratotic edge of the plantar surface (Fig. 1). There was no elevation or thickening in the area.

Case 2

A 28-year-old man, an alpinist, had noticed two spots of pigmentation on his heels one month earlier. The lesions were asymptomatic. On physical examination, he had spots of speckled, macular bluishblack pigmentation, one on the outer surface of his right heel and the other one on the inner surface of his left heel (Fig. 2). There was no elevation or thickening in the area.



Figure 1. Black heel on the left heel in a 16-year-old boy.



Figure 2. Black heel on the right heel in a 28-year-old man.

Discussion

"Black heel" (calcaneal petechiae) is a lesion affecting the back or posterolateral aspect of the heel. The cause is assumed to be trauma. The patients does not remember when the lesions occurred. It is seen almost exclusively in adolescentes or young adults engaged in active sports: football or tennis (tennis heel) and (as in our patients) mountaineering, dancer.

"Black heel" is probably more common than is realized. It is likely to be cuased by a shearing or pinching stress from abrupt contact of the foot with a floor or hard ground. As it is usually symptomless, it may be disregarded or only observed by chance [1,2].

Black heel (calcaneal petechiae) is caused by a repeated lateral shearing force of the epidermis sliding over the rete pegs of the papillary dermis. This damages the delicate papillary dermal capillaries, resulting in intraepidermal hemorrhage [3].

The exact incidence of black heel (calcaneal petechiae) is unknown. One study involving soldiers showing BH an incidence of 0,09% [4].

The diagnosis of atypical melanocytic hyperplasia should be considered in the differential diagnosis of the black heel.

In the uncertain lesions, to rule out melanoma in such clinical situations, a biopsy is needed to reveal homogeneous eosinophilic masses deposited under the nail plate or within it (transepidermal elimination) [2].

The diagnosis of black heel (calcaneal petechiae) is clinical and can be aided by paring down the lesion with a surgical blade. Melanocytic lesions will not lose their pigmentation with paring, while black heel may clear completely after the stratum corneum is removed.

Treatment is not necessary for black heel (calcaneal petechiae) because the lesion resolves spontaneously with discontinuation of the causative activity.

Skin lubrication, heel cups, a change of footwear, wearing 2 pairs of thick socks, and a break from training may reduce the incidence of black heel (calcaneal petechiae).

Sports participation can be continued without harm to the patient, although the black heel (calcaneal petechiae) will persist unless padding is added to the heel of the athletic shoe [5-7]. Complete clearing is achieved with cessation of the causative activity usually within 2-3 weeks of rest.

Conclusion

Black heels, characterized by speckled bluish-black areas of macular pigmentation occurring at the border of the heel, have been observed in two young male.

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