

A Case of Solitary Angiokeratoma Dermoscopically Mimicking Black Palm –A Dermoscopic Pitfall–

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June 25, 2022

Abstract

Solitary angiokeratoma is reported to be distinguishable from intracorneal hemorrhage. Dermoscopy shows a whitish veil in solitary angiokeratoma and a homogeneous or globular lesion in intracorneal hemorrhage. However, we encountered a case of solitary angiokeratoma that was indistinguishable from intracorneal hemorrhage by dermoscopy. Dermatologists need to recognize this dermoscopic pitfall.

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Consent statement

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

465 words, 1 figure

Key words: dermatology

Abstract

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Key Clinical Message

Solitary angiokeratoma may show a homogeneous lesion mimicking intracorneal hemorrhage in dermoscopy. Dermatologists need to recognize this dermoscopic pitfall when examining hemorrhage crusts and carefully clarify the clinical course to prevent an underlying condition being overlooked.

INTRODUCTION

Intracorneal hemorrhage may occur on the soles (black heel or talon noir) or palms (black palm or tache noir) ¹. Dermoscopy typically shows a homogeneous or globular lesion with discoloration that varies with the duration from the onset¹. Angiokeratoma represents a benign vascular lesion that histopathologically consists of dilated subepidermal vessels. Solitary angiokeratoma on the palms and soles commonly shows reddish to violaceous macules or plaques ². Zaballos et al. classified the dermoscopic findings of solitary angiokeratoma into the following 3 patterns: i) the combination of dark lacunae and a whitish veil; ii) the combination of dark lacunae, a whitish veil, and peripheral erythema; iii) the combination of dark lacunae, a whitish veil, and hemorrhagic crusts ³. We encountered a case of solitary angiokeratoma that was indistinguishable from intracorneal hemorrhage by dermoscopy.

CASE REPORT

A 38-year-old Japanese male was referred to our department with a 5-year history of a black macule without itching or pain on the right 5th finger. The patient did not recall any traumatic events before the onset. The patient had not engaged in any tasks or sports associated with hand activities. The patient had an unremarkable medical history and had received no medication, including anticoagulants and antiplatelet agents. In a physical examination, a black macule measuring 2 mm in diameter was noted on the ulnar side of the right 5th finger (Figure 1a). Dermoscopy showed a well-demarcated homogeneous reddish black area involving the sulci cutis and crista cutis (Figure 1b). There was a keratinized recess in the center. Histopathology revealed hemorrhage within the corneal layer and dilated capillary venules containing erythrocytes just beneath the epidermis with the extravasation of erythrocytes around the venules (Figures 1c and 1d). Therefore, the patient was diagnosed with solitary angiokeratoma accompanied by intracorneal hemorrhage.

DISCUSSION

There were two distinct characteristics from black palm in the present case. The clinical course was not indicative of black palm. The patient had a 5-year history of the black macule. The color of black palm varies within a short term and is dependent on the duration from the onset; dark-reddish on the 1st day, violaceous on the 2nd and 3rd day, bluish from the 4th to the 6th days, and dark green from the 7th to the 10th day ¹. Furthermore, the clinical background did not suggest a diagnosis of black palm. The patient had not engaged in any sports associated with hard hand activities. In contrast, black palm commonly occurs in association with sports causing a lot of pressure on the hands, such as weight lifting or gymnastics ¹.

The present case indicated that dermoscopy can show a single dermoscopic finding of hemorrhage crusts in solitary angiokeratoma. Dermatologists need to recognize this dermoscopic pitfall when examining hemorrhage crusts and carefully clarify the clinical course to prevent an underlying condition being overlooked.

ACKNOWLEDGMENTS

None.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

SF: contributed to validation and writing. MO: provided resources and contributed to data curation. YN: performed project administration. AA: provided supervision.

ETHICAL APPROVAL

The case report was approved by the Ethics Committee of The Jikei University School of Medicine and written informed consent was obtained from the patient.

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FIGURE LEGENDS

Figure 1.

a) Macroscopic findings. A black macule measuring 2 mm in diameter is present on the ulnar side of the right 5th finger. **b)** Dermoscopic findings. A homogeneous reddish black area involving the sulci cutis and crista cutis is observed. **c)** Microscopic findings (hematoxylin & eosin stain, $\times 40$). Hemorrhage is present within the corneal layer. **d)** Microscopic findings (hematoxylin & eosin stain, $\times 400$). Dilated capillary venules containing erythrocytes and the extravasation of erythrocytes are present just beneath the epidermis.

