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PRACTICAL DERMOSCOPY

Unilateral Digital Hyperpigmentation in a Teenager[☆]



Hiperpigmentación digital unilateral en adolescente

Case Presentation

A 14-year-old boy presented with brown pigmentation on the tip of the third finger of the left hand that had first appeared 4 months earlier. The lesion was asymptomatic and had remained stable over time (Fig. 1).

What Is Your Diagnosis?

Comment

Polarized light dermoscopy of the brown macule revealed multiple irregular light brown-reddish spots ("pebbles") located mainly on the ridges of the skin markings. The lesions were highly suggestive of subcorneal hemorrhage (Fig. 2). On



Figure 1 Brown macule on the third finger of the left hand.



Figure 2 Multiple irregular reddish-brown spots ("pebbles"). The spots were mainly distributed on the ridges of the skin markings.

further interrogation regarding possible recurrent trauma in the area of the lesion, the patient reported that he spent 2 hours a day playing video games on a PlayStation. The patient repeatedly used the affected finger to operate a lever on the video game controller. PlayStation use was discontinued and the skin lesion disappeared completely.

Although the parallel ridge pattern (PRP) in acral skin has a specificity of 99% for melanoma,¹ other benign lesions can also have this pattern. Pigmentation caused by dye, macules typical of certain racial groups with dark skin phototypes, pigmented viral warts, macules associated with Peutz-Jeghers syndrome, chemotherapy-induced acral pigmentation, and acral subcorneal hemorrhage may also show PRP.² Acral subcorneal hemorrhage appears following repeated minor trauma at the same site, normally in association with work or sports. The heel is the area most often affected by acral subcorneal hemorrhage (usually caused by physical exercise), which clinically manifests as a black macule that may be well or poorly defined. Dermoscopy of subcorneal hematomas can reveal various patterns: homogeneous reddish-blackish pigmentation, PRP with pigment occupying the entire ridge, and, less frequently, a parallel-furrow or fibrillar pattern. Another possible pattern is that seen in our patient: multiple rounded and irregular reddish-black or brown "pebbles" along the ridge.³ The globular pattern may also be present as peripheral satellite globules isolated from the main lesion. In conclusion, subcorneal hematomas

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can show a great variety of patterns and can mimic multiple lesions, but the presence of blackish-reddish or brown coloring can provide a clue regarding the correct diagnosis.⁴ Another finding suggestive of subcorneal hematoma is the disappearance of the lesion with superficial scraping.

Excessive video game use has been associated with the appearance of blisters, onycholysis, and acral subcorneal hemorrhage on the tips of fingers that repeatedly operate the video game controller.⁵ Such lesions were first described in the thumb but have since been reported in other fingers, as in our patient. Similar lesions caused by intensive mobile telephone use have been reported in teenagers.⁶

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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