

Black macules on the sole of the foot

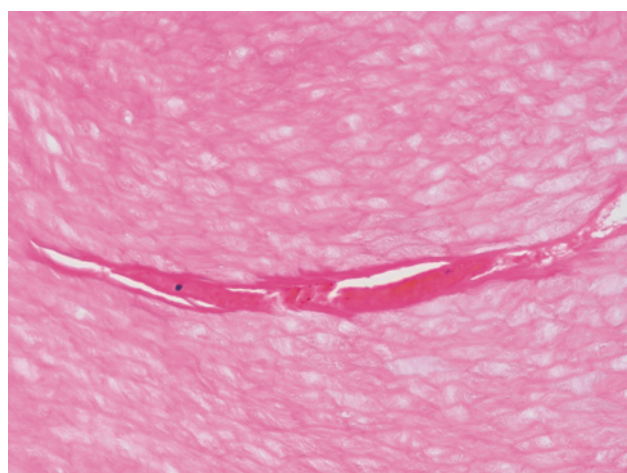


Photo: Stein Helge Røsbekk

A woman in her late 20s, second trimester of her third pregnancy, no complications, discovered black spots on the soles of her feet. Eight dark, macular skin lesions 1–5 mm in diameter were found on the one sole (left image) and one on the other. The woman felt well, but she suffered from symphysiolysis and her gait had therefore changed. She also reported that she had been unusually physically active recently, but had not engaged in sport.

Microscopic examination of punch biopsy revealed small areas of light to dark brown pigmentation of the stratum corneum. The microscopy image is stained with haematoxylin and eosin and shows a tear in the stratum corneum with extravasated red blood cells and dark particles consistent with the degradation products of haemoglobin. Perls' staining confirmed iron-containing degradation products of haemoglobin. Other parts of the epidermis and dermis were normal. The diagnosis was therefore post-traumatic plantar petechiae.

These skin changes were first described in 1961 in basketball players under the name «calcaneal petechiae» and have subsequently been found among several kinds of athletes (1–3). Alternative terms are «talon noir» and «post-traumatic punctate haemorrhage of the skin». The condition can arise when pressure points are subjected to repeated strain, which

results in intraepidermal bleeding and therefore dark skin lesions. Histologically, areas of pigmentation and extravasated red blood cells are found in the stratum corneum together with haemoglobin and degradation products thereof, and the latter can be detected by means of special stains for iron detection (4).

We are not aware of any previous descriptions of post-traumatic plantar petechiae in Norway, nor of any descriptions of this condition in pregnant women. Nevertheless, it is likely that these are common skin lesions. A survey of 596 German athletes revealed an incidence of 2.9% (5). Post-traumatic plantar petechiae are completely harmless. They vanish spontaneously in the course of a few weeks if the strain is taken off the pressure points, as also happened in the present case.

The patient has consented to the publication of the article.

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