Dermatology Practical & Conceptual

Supine Dermoscopy for Improved Visualisation of Lower Limb Lesions

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Case Presentation

Dermoscopic evaluation of suspicious lesions in the context of venous insufficiency, such as varicose veins, venous stasis, and lipodermatosclerosis, remains a diagnostic challenge. The background erythema created by non-lesional vasculature often obscures the assessment of true lesional structures.

Teaching Point

Dermoscopy helps assess for atypical vascular morphology such as predominantly central vessels, polymorphous vessels, and milky red-pink areas, which is critical in differentiating malignant from benign pigmented skin lesions, especially in the context of amelanotic and hypomelanotic melanoma [1,2].

To better delineate skin lesion vasculature from background vascular noise, consider laying patients supine to reduce venous congestion (Figure 1). This is particularly important in gravity-dependent areas such as the lower limbs. Furthermore, use non-contact polarized dermatoscopes or immersion fluids of a high viscosity with contact dermatoscopes, to minimize blanching of vessels and thereby maximizing visualization of vascular architecture in cutaneous lesions [1].

References

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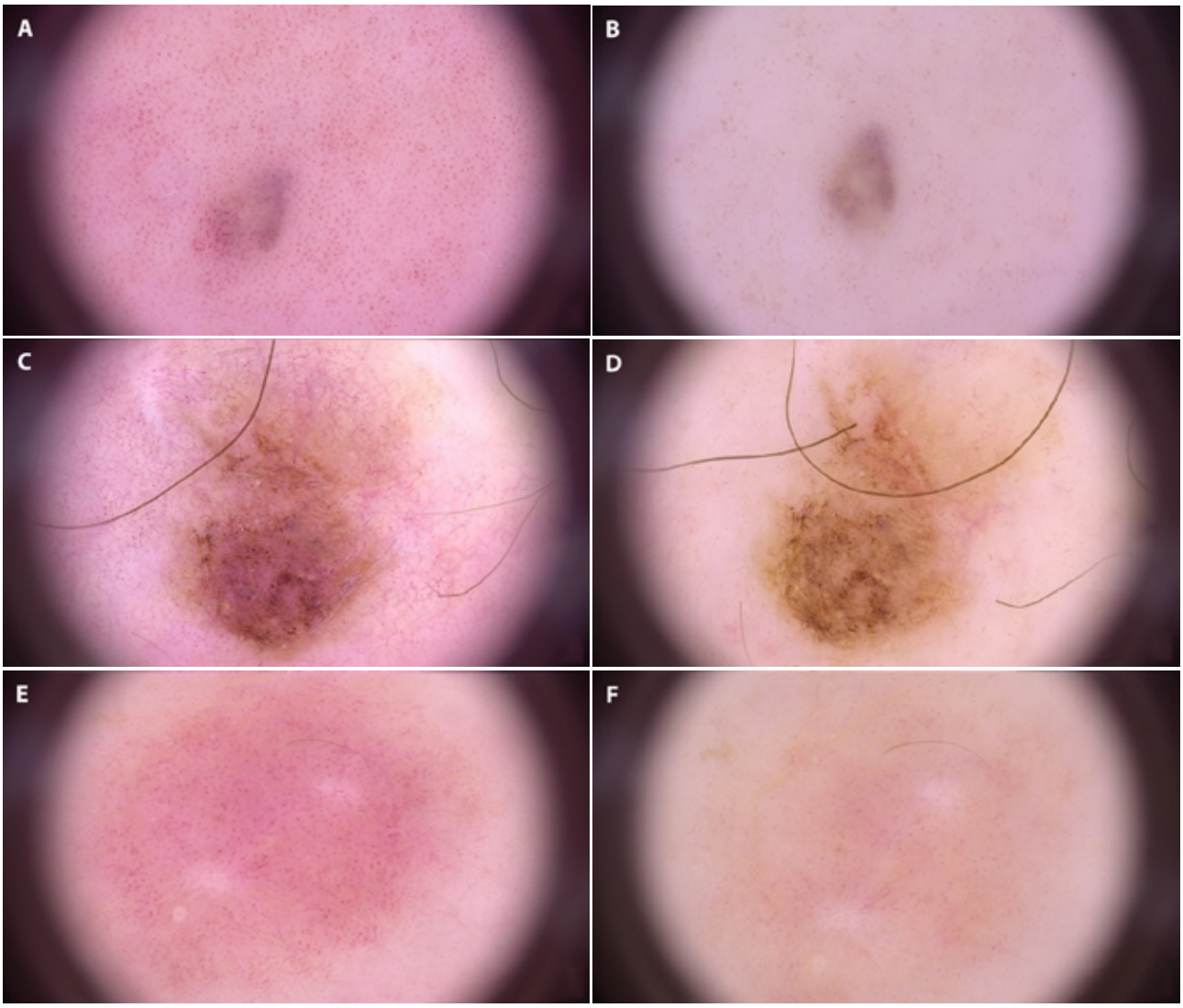

Figure 1. (A,C,E) Dermoscopy of cutaneous lesions of the lower leg with patients standing up. Minimal pressure was applied. Note the prominent background blood vessels which may obscure proper examination of the skin lesion of interest. (B,D,F) Dermoscopy of the same lower leg skin lesions with patients laying supine. Minimal pressure was applied. Reduced background blood vessels allow for clearer visualization of the lesion. Dermoscopic pictures taken with Medicam 1000, FotoFinder Systems.