Smear the footplate with soap water to prevent misting up during dermoscopy



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TECHNICAL CHALLENGE

Misting of the dermoscope footplate is a practical problem while doing mucoscopy of oral lesions or dermoscopy of hyperhidrotic palms and soles. The misting hampers a better assessment of dermoscopic features.

SOLUTION

Simply coating the footplate of the dermoscope with a thin layer of soap water may rectify this problem. To demonstrate this, we performed a mucoscopy in a subject with lower lip telangiectasia. During the procedure the footplate became misted with exhaling humid air, and the image captured was blurred (Fig 1, A). We then smeared the footplate with soap water and dried it off with a cotton sheet. The image captured after this trick had better clarity (Fig 1, B). The misting occurs when warm water vapors condense on the cooler contact footplate of

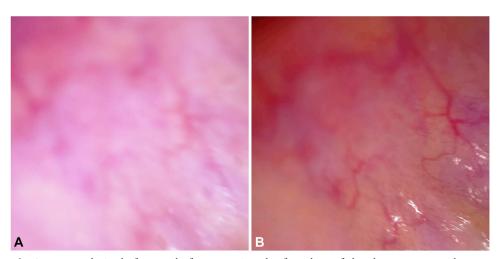


Fig 1. Image clarity before and after smearing the footplate of the dermoscope with soap water. **A**, Misting of the footplate resulted in an image with poorer contrast. **B**, Smearing the footplate with soap water prevented misting, and an image with better contrast was captured. The left upper quadrant was out of focus in both images because of the convex contour of the lip. (Dermlite DL4; 3Gen, San Juan Capistrano, CA; image captured by OnePlus A6000 smartphone, OnePlus Technology [Shenzhen] Co, Ltd, Shenzhen, Guangdong, PRC)

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the dermoscope. The tiny water droplets thus form scatter light and reduce the ability of the lens to give an image with contrast. Smearing the footplate with soap water leaves behind a thin surfactant film that reduces the surface tension of water droplets. This prevents formation of spherical water droplets and helps water droplets to spread out evenly to form a thin transparent layer. ¹

REFERENCE

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