

Cosmetics as Contrast Agents: Makeup-Enhanced Visualization of Seborrhoeic Keratosis in a Teledermatology Referral

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Abstract

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Original Manuscript

Cosmetics as Contrast Agents: Makeup-Enhanced Visualization of Seborrhoeic Keratosis in a Teledermatology Referral

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Dear

Editor,

While cosmetic products are typically seen as artefacts that hinder skin assessment, we report an unusual case where residual makeup enhanced the visibility of a seborrhoeic keratosis (SK), acting as an unintentional contrast agent. In the context of teledermatology, where image quality and surface texture are critical to triage decisions, such artefactual enhancements may paradoxically aid pattern recognition.

An 84-year-old woman was referred via teledermatology for a longstanding

pigmented lesion on the left cheek. On clinical (macroscopic) examination, the lesion displayed SK characteristics — including a cerebriform surface, milia-like cysts, and comedo-like openings. Notably, there were yellow-beige deposits between the ridges, later confirmed to be foundation makeup. Far from obscuring the lesion, the makeup had settled into the sulci and exaggerated the surface architecture, making the cerebriform pattern unusually prominent.

To explore this further, we reviewed additional images of the same patient. In the distant view (Figure 1 A), the cheek lesion with makeup appeared textured and ridged, while a second lesion at the hairline; not covered in makeup, appeared flat and nondescript. On close-up macroscopic imaging (Figure 1 B), the makeup-enhanced cerebriform pattern became even more striking, visually unmasking structures that were nearly comparable to those seen in dermoscopy. Indeed, when compared with the dermoscopic view (Figure 1 C), the foundation acted like a visual contrast agent, selectively highlighting the gyri and sulci; mimicking polarised light or ink staining.

This real-world observation offers a simple but valuable insight: makeup may occasionally improve the visibility of benign keratinocytic lesion structures , particularly cerebriform ridges in SK. Much like the carbon particles in ink used to mark margins in dermatopathology, the opaque particulate matter in cosmetics may unmask subtle topography, especially on the face where lesions are flatter and photographic artefacts are common.

While we do not suggest applying makeup for diagnostic purposes, this case

reminds us that not all artefacts are unhelpful. When reviewing facial lesions, clinicians should be aware that cosmetic residue might not always hinder, and may occasionally aid, the recognition of benign patterns.

Figure Legends

Figure 1.

- (A) Clinical image of the left face showing two lesions: the lower cheek lesion (with residual makeup) displays surface ridging, while the upper lesion at the hairline (without makeup) appears flat and undetailed.
- (B) Macroscopic close-up of the cheek lesion. Foundation enhances cerebriform ridges and comedo-like openings, visually unmasking surface architecture comparable to dermoscopy.
- (C) Dermoscopic image of the same cheek lesion confirming hallmark features of seborrheic keratosis: exaggerated sulci, comedo-like openings, milium-like cysts, and pigment trapped in grooves.

Supplementary Files

Figures

Clinical image of the left face showing two lesions: the lower cheek lesion (with residual makeup) displays surface ridging, while the upper lesion at the hairline (without makeup) appears flat and undetailed.



Macroscopic close-up of the cheek lesion. Foundation enhances cerebriform ridges and comedo-like openings, visually unmasking surface architecture comparable to dermoscopy.



(C) Dermoscopic image of the same cheek lesion confirming hallmark features of seborrhoeic keratosis: exaggerated sulci, comedo-like openings, milia-like cysts, and pigment trapped in grooves.

