

Clinical Pearl: Increasing Utility of Isopropyl Alcohol for Cutaneous Dyschromia

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Alcohol can be used as a diagnostic aid for patients with dyschromia commonly seen in terra firma-forme dermatosis, confluent and reticulate papillomatosis, and acanthosis nigricans. Although biopsy can definitively determine diagnosis, proper utilization of isopropyl alcohol may avert unnecessary procedures.

Practice Gap

Conditions with dyschromia including terra firma-forme dermatosis (TFFD), confluent and reticulate papillomatosis (CARP), and acanthosis nigricans are difficult to distinguish from one another.

Diagnostic Tools

Since its development in 1920, dermatologists have utilized isopropyl alcohol in ways that exceed conventional antimicrobial purposes. If TFFD, CARP, and acanthosis nigricans are suspected, the first step in any algorithmic approach should be to rub the skin with an alcohol pad using firm continuous pressure in an attempt to remove pigmentation. Complete resolution of dyspigmentation strongly supports a diagnosis of TFFD¹ and can be curative (Figure). Alcohol can similarly lighten CARP but to a lesser degree than TFFD.² In contrast, acanthosis nigricans will display minimal to no improvement with isopropyl alcohol.

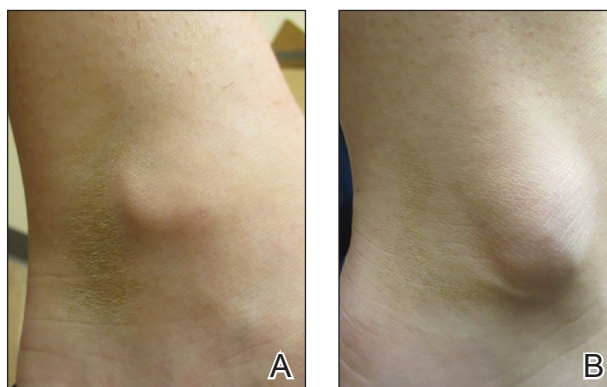
Practice Implications

Isopropyl alcohol has few side effects and each swab costs less than a dime. It is extremely cost effective compared to biopsy and subsequent pathology and laboratory costs. Patients appreciate a noninvasive initial approach, and it is rewarding to treat a cosmetically disturbing condition with ease.

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Terra firma-forme dermatosis with a typical brownish color resembling dirt on the right ankle (A). After application of isopropyl alcohol, the discoloration disappeared (B).

Swabbing the skin with alcohol pads reflects light and improves visualization of veins that should be avoided during surgery. Alcohol-based gel inhibits bacterial colonization, reduces dermatoscope-related nosocomial infection, and enhances dermoscopic resolution.³ Alcohol swabs quickly remove gentian violet, which aids in porokeratosis diagnosis; the pathognomonic cornoid lamella of porokeratosis retains gentian violet.⁴ A solution of 70% isopropyl alcohol preserves myiasis larvae better than formalin, which causes larval tissue hardening. Alcohol also can be squeezed into the central punctum in myiasis as a form of treatment.⁵ In conclusion, alcohol represents a convenient, inexpensive, and helpful tool in the dermatologist's armamentarium that should not be forgotten.

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