

Comment on “Skin stripping technique: A diagnostic clue for fiberglass dermatitis”



To the Editor: We read with interest the article entitled “Skin stripping technique: A diagnostic clue for fiberglass dermatitis” by Company-Quiroga et al.¹ However, if skin stripping may serve as a “clue” to the diagnosis of fiberglass dermatitis, reflectance confocal microscopy (RCM) may be the Sherlock Holmes of confirmation. This was the only technique that allowed us to diagnose fiberglass dermatitis in a patient who had no evidence of fiberglass fragments or granulomas found on skin biopsy specimens and who had negative results with adhesive tape tests. In vivo RCM demonstrated hyperrefractive linear structures of similar diameter and varying length, consistent with fiberglass fibers.² This calls into question the sensitivity of adhesive tape testing compared with RCM given this patient’s negative results. In addition, RCM was able to locate fibers not only at the level of the stratum corneum but also at the levels of the stratum granulosum and spinosum. Other case reports on fiberglass dermatitis have shown that biopsy specimens typically reveal epidermal spongiosis and a predominantly perivascular lymphocytic inflammatory infiltrate.³ RCM similarly revealed parakeratosis, spongiosis, an inflammatory cell infiltrate, and disarray of the dermoepidermal junction in this patient. Because RCM identified fibers that were not detected by obtaining a biopsy specimen, combined with its noninvasive nature, RCM may be a superior diagnostic tool. Because of these findings, the statement in the article reading, “[Glass fibers] can be accurately identified only by using polarized light microscopy to avoid

misdiagnosis” should be reconsidered. Although RCM has not been adopted routinely in US dermatology clinics, it has increased in popularity in the past several years because of its potential to diagnose skin lesions with high accuracy and without needing to obtain a biopsy specimen. We expect to see more research on the utility of RCM in dermatology in the near future, and potentially its specific role in diagnosing fiberglass dermatitis.

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Funding sources: None.

Conflicts of interest: None disclosed.

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<https://doi.org/10.1016/j.jaad.2018.11.062>