

## Cosmetic & Pharmaceutical Research > Cosmetic & Pharmaceutical Research > Pigmentation / Melasma

4

Reflectance confocal microscopy and histological features of depigmentation after local corticosteroid injection.

Gu AK, Zhang XJ, Liu XP, Kong XJ, Zhang LT. Skin Res Technol. 2019 Jun 18. doi: 10.1111/srt.12730.

## **ABSTRACT**

BACKGROUND: Clinically, depigmentation after local corticosteroid injection is not rare. But there are less articles about its reflectance confocal microscopy (RCM) and histological features. This study aimed to define the RCM features and histopathologic findings of hypopigmentation after local corticosteroid injection and to analyze the correlations between the above two methods. METHODS: Forty cases with hypopigmentation after local corticosteroid injection were used to analyze the clinical and RCM features. Subsequently, for 20 of 40, an excision biopsy of the same imaged areas for histopathologic examination was executed. RESULTS: Our results showed that all 40 cases had round or ellipse hypopigmented macules with obscure boundary and 26 of 40 lesions' long diameter went along limbs. The RCM features and the histological findings revealed all patients had variable degrees of epidermal thinning, flattening rete ridges, reduced melanin, and no inflammatory cell infiltration. MART-1 analysis revealed the number of melanocytes was normal but with no or less melanin by Fontana-Masson staining. CONCLUSIONS: Depigmentation after local corticosteroid injection was a kind of disease with intact melanocytes, whose function was impaired. RCM features offer a high consistency with histopathologic findings. It thus constitutes a promising adjuvant tool for its diagnosis and for therapeutic follow-up. © 2019 John Wiley & Sons A/S. KEYWORDS: corticosteroid; depigmentation; histology; reflectance confocal microscopy PMID:31215072 DOI:10.1111/srt.12730