

Cosmetic & Pharmaceutical Research > Cosmetic & Pharmaceutical Research > Hair and adnexia

3

Reflectance Confocal Microscopy of the Yellow Dot Pattern in Alopecia Areata

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ABSTRACT

BACKGROUND: The presence of yellow dots is a characteristic dermoscopic finding in alopecia areata.

The aim of this study was to investigate the yellow dot pattern observed at dermoscopy in alopecia areata with reflectance confocal microscopy (RCM) and correlate RCM findings with pathological features.

OBSERVATIONS: Six patients affected by alopecia totalis entered the study. Patients were first submitted to scalp dermoscopy, which was followed by RCM examination of the same area.

After RCM, a 5-mm punch biopsy specimen was also taken. Dermoscopic findings showed the yellow dot pattern in all patients, with round or polycyclic yellow-pink dots often containing miniaturized or broken hair shafts.

At RCM, a Vivablock mosaic taken at the level of the spinous layer showed striking reduction of follicular adnexal structures and empty lumina containing highly refractile material corresponding to the yellow dots seen on dermoscopy.

The pathological features showed that the yellow dots correspond to the dilated infundibula of the velluslike anagen and telogen follicles that characterize the chronic phase of alopecia areata.

CONCLUSION: The RCM study of the yellow dot pattern showed a good correlation with the dermoscopic and pathological findings and confirms that the yellow dots correspond to inefficient follicular structures that often contain hair remnants.