

Commentary: Erythrasma Capitis and Hair Loss – An Under Diagnosed Entity?Rauno J. Harvima, MD, PhD, DSc^{1,2*} and Ilkka T. Harvima, MD, PhD^{1,2}¹Department of Dermatology, University of Eastern Finland, Finland²Department of Dermatology, Kuopio University Hospital, Kuopio, 70210, Finland

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ABSTRACT

Corynebacterium minutissimum causing erythrasma is considered to belong to normal skin flora. The locations are commonly nasolabial folds, groin, axillae, intergluteal folds, submammary region and interdigital spaces of the toes. There is only one case report of two young women on *Corynebacterium* in the scalp, causing diffuse and patched hair loss, thus it might give the possibility of underdiagnosis. In addition oral antibiotic treatments for various infections and acne could, thus, proactively or preventively lower the risk of scalp erythrasma with rare outcome.

Keywords: Erythrasma, Diffuse Patched Hair Loss; Eczema; *Corynebacterium*; Treatment

Erythrasma in the Body

Corynebacterium minutissimum causing erythrasma is considered to belong to normal skin flora. The locations are commonly nasolabial folds, groin, axillae, intergluteal folds, submammary region and interdigital spaces of the toes. It can be detected by UV lamp (Wood's illumination lamp) as brick tile-red or coral-red color in a dark room. *Corynebacteria* can be cultivated by a special procedure and it is detectable by histology. Usually, mild topical antibacterial treatments are used, e.g., fucidic acid, clindamycin, mupirocin, clotrimazole or miconazole cream or oral and topical erythromycin and oral tetracyclin^{1,4}. Oral treatments include a single dose of 1g clarithromycin, erythromycin 250 mg QID for 14 days or tetracyclin 250 mg QID for 14 days¹. However, there are only one case report on *Corynebacterium minutissimum* in the scalp⁵. Also, the Braun-Falco's or Rook's Textbook of Dermatology do not reveal whether it could cause any effect in the scalp, especially hair loss^{3,4}.

Erythrasma Capitis Cases

We published a case report⁵ of two cases of a 16-year and 21-year-old women who had diffuse hair loss with eczema or patches for about 2 months, respectively. Studies revealed excessive amounts of *Corynebacteria* in the scalp by histology and *Corynebacterium minutissimum* in the bacterial culture. Other possible causes like *Treponema pallidum* were excluded. Both patients were treated by erythromycin for 2 months. At the follow-up their hairs were noted to have grown fully but curly.

Conclusion and Discussion

It could be possible that the role of *Corynebacteria* might be underestimated and underdiagnosed. Our 2 female cases with a short period of hair loss suggests to take into account the possibility of *Corynebacteria*. The patched type may be mixed with alopecia areata.

Corynebacteria are sensitive also for tetracyclines. Thus, it is

emphasizing to speculate whether erythrasma capitis with hair loss would be treated “accidentally” proactively or preventively by tetracyclines used for common acne for much longer time than suggested 2 weeks for erythrasma of body areas except scalp. Also, other antibiotic treatments might have a similar preventive effect. This could be a target for a wider study.

Sources of Support

None.

Conflict of Interest

None.

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