

ABSTRACT

TITLE

Clinical and Trichoscopic Patterns of Hair Loss in Systemic Lupus Erythematosus and its Correlation with Systemic Lupus Erythematosus Disease Activity Index (SLEDAI)

INTRODUCTION

Alopecia is one of the commonest cutaneous manifestation in Systemic lupus erythematosus (SLE) and this constitutes one of the diagnostic clinical criterion in Systemic Lupus International Collaborating Clinic (SLICC) criteria.

OBJECTIVE

To observe the clinical and trichoscopic patterns of different types of alopecia seen in Systemic Lupus Erythematosus.

To study the patterns of hair loss in systemic lupus erythematosus and its correlation with SLE disease activity index (SLEDAI score).

METHODS

Ninety six patients of SLE with complains of hair loss were enrolled during the study period between September 2016 and August 2017. The clinical patterns of alopecia were recorded and categorised as diffuse non-scarring alopecia, alopecia areata and discoid lupus erythematosus. Trichoscopy was done from the lesional areas with alopecia areata and discoid lupus erythematosus, and from the frontal and occipital scalp in diffuse non-

scarring alopecia. The patients with hair diameter diversity (HDD) more than 20% were classified as androgenetic alopecia (AGA). The patients who did not have HDD more than 20% but had diffuse alopecia were classified as telogen effluvium (TE). The other features looked for were vellus hair, predominant single follicular units, yellow dots, peripilar sign and short regrowing hair. Trichoscan was conducted in diffuse non-scarring alopecia to correlate the findings. Trichoscopy was done from the patches of alopecia areata and from the most representative site of discoid lupus erythematosus. SLEDAI scoring was calculated and was correlated with alopecia.

RESULTS

There were 96 patients of SLE with alopecia. The majority of patients with diffuse non-scarring alopecia had onset of hair loss in third decade of life i.e. between 21-30 years. The female to male ratio was 6:1. There were 14 patients (17.94%) who had clinically evident AGA and 14 patients (17.94%) with lupus hair. After trichoscopy, there were 19 patients with AGA, 46 patients with TE and 13 patients with the combination of AGA and TE. There were 6 patients with alopecia areata and 26 patients with discoid lupus erythematosus. The trichoscopic findings in alopecia areata showed numerous yellow dots in 63.9% patients, scanty yellow dots in 19.4% patients, black dots in 44.43%, broken hair in 63.9%, short vellus hair in 66.66% and short regrowing hair in 50% of patients. The commonest trichoscopic findings in DLE were blue gray dots and globules (81%), loss of follicular units (84%) and structureless white areas (96%); and other common findings were hyperkeratotic plugs (69%) and telangiectasia (65%). The mean

SLEDAI score was 11.97 ± 8.495 and the majority of the patients showed moderate activity (30.2%).

CONCLUSION

The most common cause of alopecia in our SLE patients was chronic telogen effluvium.

Trichoscopy is an effective tool in diagnosing different patterns of alopecia in SLE.

KEYWORDS

Alopecia, SLE, Trichoscopy, trichoscan, SLEDAI