

Original Research

Assessment of the Trichoscopic findings in alopecia areata patients

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ABSTRACT:

Background: Alopecia areata (AA) is a common type of hair loss or alopecia in humans; it is an autoimmune disease with a variable, typically relapsing or remitting, course that can be persistent – especially when hair loss is extensive. The present study was conducted for assessing the Trichoscopic findings in alopecia areata patients. **Materials & methods:** 20 cases of alopecia areata visiting the outpatient and inpatient Department of Dermatology were included in the study. After obtaining written informed consent, the cases were subjected to detailed history taking including demographic data, personal history, family history, present and past medical history and history of drug intake. Trichoscopy was done to determine the various hair signs, follicular and interfollicular patterns. All the results were recorded and analysed by SPSS software. **Results:** Yellow dots, Black dots, Cadaverized hair, Vellus hair, Leukotrichia, Exclamation hair, Tulip hair, Pigtail hair, Coudability hair, Coudability sign and Upright regrowing hair were seen in 70 percent, 65 percent, 40 percent, 60 percent, 45 percent, 65 percent, 20 percent, 45 percent, 40 percent, 45 percent, and 30 percent respectively. **Conclusion:** In addition to clinical and histopathological findings, trichoscopic examination is simple, helpful modality that plays an important role in the diagnosis of alopecia areata.

Key words: Alopecia, Areata, Trichoscopic

Received: 19 August, 2021

Accepted: 22 September, 2021

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This article may be cited as: Rajput P. Assessment of the Trichoscopic findings in alopecia areata patients. J Adv Med Dent Scie Res 2021;9(10):146-148.

INTRODUCTION

Alopecia areata (AA) is a common type of hair loss or alopecia in humans; it is an autoimmune disease with a variable, typically relapsing or remitting, course that can be persistent – especially when hair loss is extensive. Alopecia areata is the second-most frequent non-scarring alopecia, after male and female pattern alopecia. Clinical patterns of hair loss in alopecia areata are usually very distinct. The most common pattern is a small annular or patchy bald lesion (patchy alopecia areata), usually on the scalp, that can progress to total loss of scalp hair only (alopecia totalis), and total loss of all body hair (alopecia universalis).¹⁻³

Trichoscopy, or dermoscopy and videodermoscopy of the scalp, may reveal features of a specific type of hair loss. As an example, in the case of alopecia areata, a characteristic “yellow dot” pattern is often seen, as well as micro-exclamation hairs and black cadaverized hairs or “black dots”. Dermoscopy in androgenetic alopecia reveals greater than 20%

diversity in the hair diameter. A brown, depressed halo at the follicular opening can be observed in early androgenetic alopecia and yellow dots can be seen in advanced cases. Further, a honeycomb-pigmented appearance can be appreciated in sun-exposed regions of the scalp.⁴⁻⁶ Hence; the present study was conducted for assessing the Trichoscopic findings in alopecia areata patients.

MATERIALS & METHODS

The present study was conducted for assessing the Trichoscopic findings in alopecia areata patients.

INCLUSION CRITERIA

1. Patients willing to participate in the study
2. Patients who have signed the informed consent form.

After obtaining clearance and approval from the institutional ethical committee, 20 cases of alopecia areata visiting the outpatient and inpatient Department of Dermatology were included in the study. After

obtaining written informed consent, the cases were subjected to detailed history taking including demographic data, personal history, family history, present and past medical history and history of drug intake. Relevant lab investigations to diagnose any underlying disease state and other organ/system involvement were done. Clinical diagnosis was established by history and physical examination. Trichoscopy was done to determine the various hair signs, follicular and interfollicular patterns. All the results were recorded and analysed by SPSS software.

RESULTS

Mean age of the patients was 46.8 years. Out of 20 patients, 70 percent of the patients were males while the remaining were females. Out of 20 patients of Alopecia areata, Yellow dots, Black dots, Cadaverized hair, Vellus hair, Leukotrichia, Exclamation hair, Tulip hair, Pigtail hair, Coudability hair, Coudability sign and Upright regrowing hair were seen in 70 percent, 65 percent, 40 percent, 60 percent, 45 percent, 65 percent, 20 percent, 45 percent, 40 percent, 45 percent, and 30 percent respectively.

Table 1: Trichoscopic findings of Alopecia areata (n=20)

Trichoscopic findings	Number of patients	Percentage
Yellow dots	14	70
Black dots	13	65
Cadaverized hair	8	40
Vellus hair	12	60
Leukotrichia	9	45
Exclamation hair	13	65
Tulip hair	4	20
Pigtail hair	9	45
Coudability hair	8	40
Coudability sign	9	45
Upright regrowing hair	6	30

DISCUSSION

AA typically presents as smooth, sharply demarcated, round patches of hair loss without atrophy with “exclamation point hairs” observed on the periphery of the patches. Special designations of the disease include alopecia universalis (AU) (total body hair loss), alopecia totalis (AT) (total scalp hair loss), or alopecia in an ophiasis pattern (band-like hair loss on the temporal and occipital scalp). Less common variants include the diffuse variant with widespread thinning of hair across the scalp or the reticular pattern with recurrent hair loss in one area and spontaneous hair regrowth in another. Ophiasis inversus causes band-like hair loss in the frontoparietotemporal area.⁶⁻⁹ Hence; the present study was conducted for assessing the Trichoscopic findings in alopecia areata patients.

Mean age of the patients was 46.8 years. Out of 20 patients, 70 percent of the patients were males while the remaining were females. Out of 20 patients of Alopecia areata, Yellow dots, Black dots, Cadaverized hair, Vellus hair, Leukotrichia, Exclamation hair, Tulip hair, Pigtail hair, Coudability hair, Coudability sign and Upright regrowing hair were seen in 70 percent, 65 percent, 40 percent, 60 percent, 45 percent, 65 percent, 20 percent, 45 percent, 40 percent, 45 percent, and 30 percent respectively. Karadağ Köse Ö et al evaluated the potential benefit of a handheld dermatoscope in the clinical diagnosis of alopecia. In all, 144 patients with alopecia and 144 age- and sex-matched control subjects were enrolled in the study. The dermatoscopic patterns of circular hairs, dirty dots, epidermal scale, and pustules showed no statistically significant difference between patients

and control subjects. The following features were significantly more common, or observed solely, in particular types of alopecia: hair diameter diversity, peripilar sign, and empty follicles in androgenetic alopecia; yellow dots, black dots, tapering hairs, and broken hairs in alopecia areata; absence of follicular openings, tufted hairs, white dots, follicular hyperkeratosis, pili torti, red dots, honeycomb pigment pattern, pink-white appearance, crusts, and pustules in primary cicatricial alopecias.¹⁰

In a similar study conducted by Kibar M et al, authors determined the relationship of trichoscopic findings in alopecia areata with disease activity, severity and clinical subtype in Turkish patients. Trichoscopic examinations of 39 patients with alopecia areata were compared with 309 alopecia patients including psoriasis (n = 31), seborrhoeic dermatitis (n = 112), female androgenetic alopecia (n = 138), male androgenetic alopecia (n = 63), female androgenetic alopecia of male pattern (n = 5), telogen effluvium (n = 22) and trichotillomania (n = 4).¹¹ Chiramel MJ et al, in a similar study, compared the trichoscopic characteristics of different types of alopecia, identify features of diagnostic value, and to determine the utility of trichoscopy in the diagnosis of alopecia. The utility of trichoscopy in difficult cases of alopecia was assessed statistically. One hundred and twenty patients of alopecia (90 non-cicatricial, 30 cicatricial) were recruited. The diagnosis was made on the basis of a detailed history and clinical examination, and confirmed by biopsy and relevant investigations in difficult cases. Yellow dots (63.3%) were the most common trichoscopic feature followed by thin hair

(40.8%). Among the 21 difficult cases of alopecia, trichoscopy was diagnostic in 19 (90.5%).¹²

CONCLUSION

In addition to clinical and histopathological findings, trichoscopic examination is simple, helpful modality that plays an important role in the diagnosis of alopecia areata.

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