ORIGINAL RESEARCH PAPER

Dermatology

# DERMOSCOPIC FEATURES IN CICATRICIAL AND NON CICATRICIAL ALOPECIA

KEY WORDS:

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**ABSTRACT**

**Aim:** The aim is to study the dermoscopic findings of various cicatricial and noncicatricial alopecias and to explore the utility of dermatoscopy in examination and diagnosis of various hair loss disorders **Materials And Methods :** All alopecia patients attending skin OPD in Dr. PDMMC college and hospital, Amravati from January 2019 to January 2021, to study dermoscopic findings along with detailed history and cutaneous examination **Result:** Out of 63 cases 14 were found to have cicatricial alopecia and 49 were non cicatricial Most of the patients belonged to the age group 21-30 years. Most common presentation was Alopecia areata followed by Androgenetic alopecia. Most common dermatoscopic finding was Honeycomb pigmentation **Conclusion:** Dermoscopy is a diagnostic aid in differential diagnosis of hair loss and scalp diseases and in deciding line of treatment

## INTRODUCTION

Alopecia is defined as complete or partial hair loss from scalp and other bearing sites of the body.[1]

Cicatricial alopecias are group of disorders in which follicular units are replaced by fibrous tissue, resulting in progressive and permanent scarring and hair loss, whereas in non cicatricial alopecia changes are reversible. A dermatoscope is a non – invasive, diagnostic tool that visualizes subtle clinical patterns of skin lesions and subsurface skin structures not visible to unaided eye.[1]

Dermoscopy of the scalp is termed as trichoscopy. Structures which may be visualized by trichoscopy include hair shafts, hair follicle openings, perifollicular epidermis and cutaneous micro vessels.

## MATERIAL AND METHODS

This is a hospital based descriptive cross sectional study. The study was carried out at Skin OPD of Dr. PDMMC college and hospital, Amravati for a duration of 25 months from January 2019 to January 2021.

### Inclusion Criteria

1. All alopecia patients attending Dermatology OPD
2. Patient willing to participate in the study and has given written consent

### Exclusion Criteria

1. Patient not willing to participate in the study/ not give written consent
2. Patients with active secondary infection in alopecia patch

## RESULT

Total number of individuals enrolled in this study are 63.

Out of which 14 (22.22%) were found to have cicatricial alopecia and 49 (77.78%) were found to have non cicatricial alopecia. Most of the patients belonged to the age group 21-30 years(28.57%) with 31-40 years (26.99%) being second most common. Female patients were 57.14% and male patients were 42.86%

Most common presentation was Alopecia areata (26.98%) followed by Androgenetic alopecia(25.40%).

Most common dermatoscopic finding was Honeycomb pigmentation (84.13%) followed by short hair(80.95%), yellow dots(61.9%), pinpoint white dots(61.9%)

Yellow dots and pinpoint white dots were seen most commonly in Alopecia Areata

Black dots were seen in all cases of Trichotillomania and Tinea capitis

Red dots were found in cases of Discoid Lupus Erythematosus Keratotic plugs were found only in and all cases of Discoid lupus erythematosus and Lichenoid Drug Reaction

Peripilar brown sign are more commonly but not exclusively found in Androgenetic alopecia

Interfollicular vessels were not visible or out in most of the cases. Arborizing vessels were common to alopecia areata and Discoid lupus erythematosus

Loop vessels found in one case of Discoid Lupus Erythematosus

Blue-Grey pigmentation seen in Discoid Lupus Erythematosus and Lichenoid Drug Reaction

Hair diameter diversity is found to be the feature of Androgenetic alopecia

Broken and dystrophic hair are found in trichotillomania and tine capitis

Curls and twists and concretions were seen only in Tinea capitis

## DISCUSSION

Alopecias are broad category of heterogenous diseases and compromise major parts of dermatologic disorders. Trichoscopy by facilitating the diagnosis of alopecias has become an important link between clinical and histopathological diagnosis[2,3], thus avoiding the need of unnecessary biopsy. Different hair disorders may coexist, which can be differentiated by typical features in trichoscopy.[2,4] Age and sex distribution in this study was between 6 years and 58 years. Male were 42.86% while female were 57.14%. Cicatricial alopecia was 22.22% and non-cicatricial was 77.78%. in this study most common diagnosis was Alopecia areata followed by Androgenetic Alopecia and Telogen effluvium. And the most common dermoscopic finding was honeycomb pigmentation in contrast to other studies where it was seen less commonly. In our study Alopecia areata study shows yellow dots (76.5%), cadaverized hair or black dot (64.7%) Androgenetic alopecia showed HDD>20% in 100% patients , Peripilar brown sign

(56.25%) and pigtail hairs (13.33%). In Telogen effluvium single hair in one follicular unit were seen in 100% cases. IN trichotillomania, study shows broken hair at variable length in 100% cases. Tinea capitis features observed were Black dots (100%), perifollicular and interfollicular yellow scales (66.67%). Curls and twists (66.7%), broken hair (50%) , flame hair (50%). In DLE , loss of follicular ostia in 100% cases was seen. Most of this findings correlate with other studies.

## CONCLUSION

Dermascope allows us to visualize of sub-macroscopic morphologic structures invisible to naked eyes. From this study we can conclude that dermoscopy is a diagnostic aid in differential diagnosis of hair loss and scalp diseases. Also, it is useful in monitoring prognosis and treatment response in alopecias. Certain dermoscopic findings such as Exclamation mark hair in alopecia areata: Hair diameter diversity >20% and peripilar brown sign in androgenetic alopecia , broken hair of variable length in trichotillomania are better appreciated with dermascope than with the naked eyes, thus avoiding invasive procedures like biopsy. More studies need to be conducted in the field to elaborate the dermoscopic features of uncommon conditions with hair loss

## REFERENCES

1. Vora RV, Pilani AP, Kota RKS, Singhal RR, Patel TM, Bhavsar ND. Trichoscopic findings in various scalp alopecias. Indian Journal of Clinical Dermatology.2017;1:53-8
2. Doche, I., Damasco, P., Martins, G. Fundamentals of Hair and Scalp Dermoscopy. 1st ed. India: Jaypee Brothers Medical Publishers; 2019
3. Lima CS, Lemes LR, Melo DF. Yellow dots in trichoscopy: relevance, clinical significance and peculiarities. An Bras Dermatol 2017;92(5):724-6
4. Nirmal B. Dermatoscopy: Physics and Priciples. Indian J Dermatopathol Dermatol 2017;4:27-30.