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ALOPECIA AREATA: A CLINICAL AND HISTOPATHOLOGICAL STUDY

Dermatology

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ABSTRACT

Background- Alopecia areata is a common, chronic inflammatory disease that causes non scarring hair loss. Factors like genetics, environment and autoimmunity plays major role in etiopathogenesis. **Aims And Objectives:** To study the clinical manifestations and histopathology of alopecia areata **Materials And Methods:** A total of 50 patients with alopecia areata were included in the study. Detailed history, clinical examination and histopathology were noted. **Results:** The prevalence of alopecia areata in our study was 0.22% with male predominance (62%). 31-40 years was the most commonly affected age group. Vertex (60%) was the most common site affected. Histopathology showed peribulbar lymphocytic infiltrates in a swarm of bees pattern in majority. **Conclusion :** As numerous etiological factors contribute to the disease severity, a detailed enquiry regarding age and mode of onset, associated diseases and histological evidence will help in better management.

KEYWORDS

alopecia areata; atopy

INTRODUCTION

Hair is an appendage of skin that has gained attention for its cosmesis and appearance than for medical reasons. It is indeed one of the defining features of mammals. The whole of human body, except some glaborous area is covered with hair follicles either fine or terminal hairs. Too much hair or too little hair is a reason for immense psychological stress.[1] Alopecia areata is a common, chronic, inflammatory disease that causes non scarring hair loss. It can present with just a single patch of hair loss, which usually recovers spontaneously to complete alopecia which has a poor prognosis.[2] It is a common cause of abrupt onset of hair loss with both sexes being equally affected.[3] The disorder affects men, women and children of all hair colors and most frequently affects individuals between second to fourth decade of life. It can affect various hair bearing areas like scalp, beard, eyelashes, eyebrows, body hair. Various patterns like patchy, sisaipho, ophiasis, diffuse type can be seen.[4] Histopathological examination shows the findings of peribulbar inflammatory infiltrate (swarm of bees) with T cells with few histiocytes, eosinophils and plasma cells in the acute stage. In the chronic stage, miniaturized follicle, empty infundibula, perifollicular fibrosis and follicular dropout is noted.[5]

MATERIALS AND METHODS

Source Of Data: The study was done on 50 patients of clinically diagnosed alopecia areata attending the Outpatient Department of Dermatology at a Tertiary Hospital and Research Centre.

Inclusion Criteria

All clinical diagnosed cases of alopecia areata

Exclusion Criteria

Patients of alopecia areata on treatment

Method Of Data Collection

Sample Size : Total of 50 clinically diagnosed alopecia areata patients attending the Outpatient Department of Dermatology at a Tertiary Hospital and Research Centre were included in the study.

RESULTS

Fifty patients who were clinically diagnosed as alopecia areata were included in the study. A prevalence of 0.22% was noted in our study period. The most common age group was between 31-40 years of age(40%) followed by 1-10 years of age (20%) and 11-20 years of age (16%). Majority of patients were males (62%). Vertex (60%) was the most common site affected followed by occipital region (40%) and beard area (32%). Most (68%) of the patients had gradual onset of the disease. Family history was present in 76% of the patients and history of atopy was noted in 12% of the patients. Most (76%) of the patients had multiple lesions at presentation. Other autoimmune diseases like thyroid disorder, diabetes mellitus noted in 22% of the study subjects. Nail changes were noted in 10% of the subjects. Most common (32%) histological finding was peribulbar lymphohistiocytic infiltrate.

Table 1

Site of alopecia areata	Number of patients	Percentage
Frontal	12	24%
Vertex	30	60%
Occipital	24	48%
Temporal	14	28%
Parietal	13	26%
Beard	16	32%
Eyelashes	3	6%
Eyebrows	10	20%

Out of the 50 patients, 30 (60%) had vertex involvement followed by occipital region in 24 (48%) patients followed by beard region in 16 (32%) patients followed by temporal region in 14 (28%) patients which was followed by the involvement of Parietal region (26%), frontal region (24%), eyebrows (20%) and eyelashes (6%).

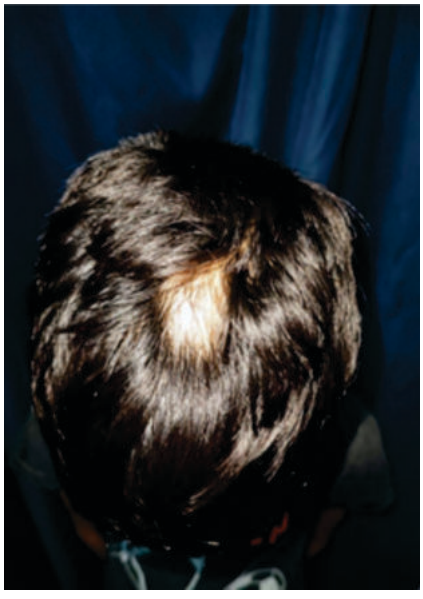

Figure 1: A Solitary Patch Of Alopecia Areata On The Vertex Region Of Scalp In A 10 Year Old Boy.

Figure 2: A Patch Of Alopecia Areata On The Vetex Region In A 35 Year Old Female.

DISSCUSION

Alopecia areata is a common cause of non-cicatricial alopecia that presents as a patchy, confluent or diffuse type of hair loss. It can present as a single, self-limiting patch or may recur at regular intervals.[6] Patients affected by alopecia areata include all age groups, sexes and ethnicities and has an unpredictable course with no definitive treatment thus contributing to the psychological stress, effect on self esteem, confidence.[7] Histology of the involved patch shows features of peribulbar lymphocytic infiltrate in a swarm of bees pattern composed of CD4+ and CD8+ T cells around the anagen follicles. Follicle miniaturization with edema, microvesiculation, apoptosis, macrophages are other changes seen.[8] Fifty patients of alopecia areata attending the Outpatient Department of Dermatology at a tertiary care hospital and research centre were included in the study. The prevalence of alopecia areata in our study was 0.22%. Similar to our study, Tugba et al., study showed 31-40 years of age was the most common age group affected. [9] In a study done by Yasmeen et al., there was male predominance, which is similar to our study.[10]

CONCLUSION

The overall prevalence of alopecia areata in our study was 0.22%. Most common age group affected was between 31-40 years of age. Males were commonly affected than females in our study. Most patients had multiple lesions at presentation. Atopy and family history was positive in some our patients. Nail changes were also noted in 10% of the patients. Other autoimmune diseases like thyroid disorder, diabetes mellitus were commonly associated. Alopecia areata is an unpredictable autoimmune disease affecting the hair follicles leading to non scarring type of alopecia.

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