Morphological Finding in Alopecia Areata

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Abstract

Background: The objective of our study was to assess morphological pattern in alopecia areata.

Method: The prospective cross-sectional study was conducted on 100 patients were enrolled as study population irrespective of age and sex in the outpatient department of Dermatology.

Results: Most common finding was patchy (89.00%) followed by ophiasis (3.00%), linear (3.00%), alopecia universalis (2.00%), reticular (1.00%) and alopecia subtoalis & alopecia totalis scalp (1.00%).

Conclusion: Patchy alopecia was the most common presentation of alopecia areata (AA).

Keywords: Alopecia, Morphology, Patchy

Introduction

Alopecia areata, also known as spot baldness, is a condition in which hair is lost from some or all areas of the body.¹ Often, it results in a few bald spots on the scalp, each about the size of a coin. The disease may cause psychological stress. People are generally otherwise healthy. In a few cases, all the hair on the scalp is lost (alopecia totalis), or all body hair is lost (alopecia universalis), and loss can be permanent. It is distinct from pattern hair loss, which is common among males.²

Alopecia areata is a common chronic inflammatory condition characterized by non-scarring hair loss on the scalp or any other hair bearing area of body. It accounts for 25% of all alopecia cases presenting to dermatologists¹. The overall incidence is about 0.7% cases in India². The lifetime risk of alopecia areata in the general population is approximately 2%³.

Alopecia areata incidence appears to increase almost linearly with the age, but the mean age of onset appears between 25-36 years⁴. Early onset alopecia areata between 5 and 10 years old predominantly presents as more severe subtypes³. Due to lack of study in our region we conduct the study to evaluate the morphological patterns of alopecia areata.

Material and Method

The prospective cross-sectional study was conducted on 100 patients were enrolled as study population irrespective of age and sex in the outpatient department of Dermatology.

All the selected alopecia areata patient’s data were recorded in proforma as epidemiological data (name, age, sex & occupation), relevant history, clinical examination including general, systemic and cutaneous examination, laboratory investigation, treatment history and characteristic lesion were also like; Number of patches,
distribution, pattern, morphology, and characteristic dermatoscopic finding were noted.

**Inclusion criteria:**
- All clinically diagnosed case of alopecia areata
- Who had given informed consent
- Untreated patient.

**Exclusion Criteria:**
- Patient who had already treated and refused to examine.

**Data Analysis:**
To collect required information from eligible patients a pre-structured pre-tested proforma was used. For data analysis Microsoft excel and statistical software Epi-info was used and data were analyzed with the help of frequencies, figures, proportions, measures of central tendency.

**Observations**

**Table 1: Socio-demographic profile**

<table>
<thead>
<tr>
<th>Mean age</th>
<th>22.02±11.02 Yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male : female</td>
<td>76 : 24</td>
</tr>
<tr>
<td>Duration of onset</td>
<td>18.36±10.02 Yrs</td>
</tr>
</tbody>
</table>

Mean age of patient was 22.02±11.02 Yrs. Male female ratio was 76:24.

**Table 2: Morphology distribution**

<table>
<thead>
<tr>
<th>Morphology</th>
<th>No of patients (n=100)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patchy</td>
<td>89</td>
<td>89.00</td>
</tr>
<tr>
<td>Reticular</td>
<td>1</td>
<td>1.00</td>
</tr>
<tr>
<td>Ophiasis</td>
<td>3</td>
<td>3.00</td>
</tr>
<tr>
<td>Linear</td>
<td>3</td>
<td>3.00</td>
</tr>
<tr>
<td>Alopecia universal</td>
<td>2</td>
<td>2.00</td>
</tr>
<tr>
<td>Alopecia subtotalis</td>
<td>1</td>
<td>1.00</td>
</tr>
<tr>
<td>Alopecia totalis scalp</td>
<td>1</td>
<td>1.00</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.00</td>
</tr>
</tbody>
</table>

In our study most common finding was patchy (89.00%) followed by ophiasis (3.00%), linear (3.00%), alopecia universalis (2.00%), reticular (1.00%) and alopecia subtoalis & alopecia totalis scalp (1.00%).

**Discussion**
In our study most common finding was patchy (89.00%) followed by ophiasis (3.00%), linear (3.00%), alopecia universalis (2.00%), reticular (1.00%) and alopecia subtoalis & alopecia totalis scalp (1.00%).

Mahmoudi H et al observed that the most common disease pattern was universalis (48.4%), followed by multiple patches in 23%, totalis in 12.7%, localized patches in 11.1% and ophiasis was observed in 4.8%. In study by Bapu et al. study, localized patches (65.5%) were most common than multiple patches (22.41%) and ophiasis pattern was recorded in 4.31%. They also observed that 88.8% patients had progressive disease and 11.2% fell in non-progressive group. In the study by Inui et al. study multiple patches were seen in 38.3%, diffuse pattern in 19%, and totalis in 17% of the patients. In this study patients presented with higher frequency of universalis and totalis subtypes as compared to previous studies because patients were selected from the diphenylcyclopropenone (DPCP) clinic.
**Conclusion**
Patchy alopecia was the most common presentation of alopecia areata (AA).

**Reference**