



A Demographic profile of alopecia Areata: A cross sectional study at Teritary Care Hospital Northern Western Rajasthan

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Abstract

Background: Alopecia areata (AA) is a common chronic inflammatory disorder characterized by non-scarring hair loss on the scalp or any other hair bearing area of body.

Method: Prospective cross-sectional study was conducted in our hospital. 110 patients with AA were included in the study. Morphological profile were observed.

Results: In our study maximum patients (34.55%) were 16-30 Yrs age group followed by 31.82% patients of 31-45 Yrs age group, 29.09% patients of 0-15 Yrs age group and only 1.82% patients were more than 60 Yrs age group. Mean age of patient was 23.76±12.50 Yrs. 65.45% patients were female and 34.55% patients were male.

Conclusion: In our study maximum patients were young male.

Keywords: Alopecia Areata, Demographic, Age.

Introduction

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 dermatologists.¹ The overall incidence is about 20.2 per 100,000 person and 2-3% of all new outpatient dermatology services in the USA & UK.² There are 0.7% of new cases in India. The lifetime risk of alopecia areata in the general population is approximately 2%.⁴

Alopecia areata incidence appears to increase almost linearly with the age, but the mean age of onset appears between 25-36 years.⁵ Early onset alopecia areata between 5 and 10 years old predominantly presents as more severe subtypes.⁴ Data shows no demonstrable

sex predilection. It is associated with increased risk of other autoimmune disease (16%), including lupus erythematosus, vitiligo and autoimmune thyroid disease. Over half of patient with alopecia areata experience poor health – related quality of life (QOL). Though patient of alopecia areata of all age group and both sexes may experience decreased QOL with alopecia areata, risk factor for poor health related QOL include the age between 20 and 50 years, female sex, lightening of skin color, hair loss more than 25%, family stress and job change. Patient with extensive alopecia areata experienced more adverse psychological effect than those with limited alopecia areata.⁶

Material And Method

The prospective cross-sectional study was conducted in the department of Dermatology, Venereology and Leprosy, Sardar Patel Medical College, Bikaner, Rajasthan. The approval was taken from the institutional ethics and thesis committee. A total 110 patints were enrolled as study population irrespective of age and sex in the outpatient department of Dermatology, Venereology and Leprosy at SP Medical College, Bikaner from September 2018 to September 2019.

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 were noted.

Inclusion criteria

- 1- All clinically diagnosed case of alopecia areata
- 2- Who had given informed consent
- 3- Untreated patient.

Exclusion Criteria

- 1- 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: Age distribution

Age in yrs	No of patients (n=110)	Percentage
0-15	32	29.09
16-30	38	34.55
31-45	35	31.82
46-60	3	2.73
>60	2	1.82
Total	110	100.00
Mean age	23.76±12.50	

In our study maximum patients (34.55%) were 16-30 Yrs age group followed by 31.82% patients of 31-45 Yrs age group, 29.09% patients of 0-15 Yrs age group and only 1.82% patients were more than 60 Yrs age group. Mean age of patient was 23.76±12.50 Yrs.

Table 2: Sex distribution

Sex	No of patients (n=110)	Percentage
Male	72	34.55
Female	38	65.45
Total	110	100.00

In present study 65.45% patients were female and 34.55% patients were male.

Table 3 :Population distribution

Area	No of patients (n=110)	Percentage
Rural	54	49.09
Urban	56	51.91
Total	110	100.00

In our study 51.91% patients were from urban residential area and 49.09% patients from rural residential area.

Table 4: Religion wise distribution

Religion	No of patients	Percentage
Hindu	103	93.67
Muslim	7	6.36
Total	110	100.00

In present study, 93.67% patients were hindu and 6.36% patients were muslim

Table 5: Disease onset

Disease onset(Yrs)	
Mean	23.51
SD	12.70

In our study mean duration of onset of disease was 23.51±12.70 Yrs.

Table 6: Disease duration

Disease duration (weeks)	No of patients (n=110)	Percentage
< 4	3	2.72
4-8	57	51.81
9-12	20	18.18
13-24	30	27.27
Total	100	100.00

In present study 51.81% patients were 4-8 weeks disease duration followed by 27.27% patients were 13-24 weeks duration,18.18% patients were 9-12 weeks

and 2.72% patients disease duration was less than 4 weeks.

Table 7: Association with other disease

Associate disease	No of patients (n=110)	Percentage
Diabetes	1	0.91
Atopy	17	15.45
Down syndrome	1	0.91
Thyroid	3	2.72
Psoriasis	1	0.91
Total	23	20.90

Discussion

A prospective cross-sectional study was conducted in the department of Dermatology, Venereology and Leprosy, Sardar Patel Medical College and PBM Group of Associated Hospitals, Bikaner, Rajasthan.

Alopecia areta (AA) is an autoimmune disease which frequently starts in childhood.^{7,8} It has variable presentation, not only in the time of onset but also in the duration, extent, and pattern of hair loss.^{9,10} Moreover, the course of disease is unpredictable as such there is spontaneous regrowth of hair occurring in 80% of patients within the first year of onset but there is sudden relapse also in some patients.¹¹⁻¹² Due to the clinical variability and unpredictable nature of disease, diagnosis and management may be difficult and sometimes challenging.

In our study different age group observed, 38 patients (34.55%) between 16-30 year, 35 patients (31.82%) of 31-45 year, 32 patients (29.09%) of 0-15 year and 2 patients (1.82%) of more than 60 year. Mean age of patient was 23.76±12.50 year and mean age of onset was 23.51±12.70 year.

Globally, the incidence of alopecia areta varies¹³ from 0.57% to 3.8%. In India, it is 0.7% according in a

hospital-based study.³ The mean age of onset of Alopecia Areata is, in the fourth decade of life. However, alopecia areata in beard area, the onset of disease can occur over a wide range of ages.¹⁴ In our study, it was 23.76 ± 12.50 years, which is in accordance with the mean age of 39.1 years as reported¹⁵ by Saceda-Corrado et al. The mean age of participants in Mahmoudi H et al. study was 26.32 year¹⁶ and similar result observed in Rudnicka et al. study¹⁷. In Karadağ Köse and Güleç's study it was 25.15 year.¹⁸

In the present study, 65.45% patients were Male, 34.55% Female. Mahmoudi H et al observed that out of 200 patients, 116 patients (58%) were male, 84 patients (42 %) female; a male preponderance was noted in this study too¹⁵. In present study 54 patients (49.09%) had rural and 56 patients (51.91%) urban residential background.

In present study, out of 110 patients, 57 patients (51.81%) gave history of 4-8 weeks of the disease duration, followed by 30 patients (27.27%) of 13-24 weeks disease duration, 20 patients (18.18%) of 9-12 weeks and 3 patients (2.72%) disease duration was less than 4 weeks. The mean duration of disease was 10.63 ± 12.09 weeks.

Out of 110 patients, 23 patients (20.90%) had associated disease, 17 patients (15.45%) presented with atopy, 3 patients (2.72%) had thyroid disease and 1 each patient (0.91%) had diabetes, Down's syndrome and psoriasis respectively. Our findings suggest that thyroid disease in 3 patients (2.72%) was slightly higher than studies³ by Sharma VK et al. They found thyroid disorder in 1% of patients. Tan E et al. in their study thyroid disease was present in 2.3% patients¹³.

Conclusion

In our study maximum patients were young male.

Reference

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