

# ORIGINAL ARTICLE

## Psychiatric disorders in Alopecia Areata patients- A clinical study

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### ABSTRACT:

**Background:** Alopecia areata (AA) is a common form of non-scarring hair loss with prevalence of about 2.1% seen in both genders. The present study was conducted to determine pattern of psychiatric disorders in patients with Alopecia Areata. **Materials & Methods:** 94 patients of Alopecia Areata of both genders were enrolled. Factors such as age at onset, duration, form and number of episodes of AA in patients was recorded. **Results:** Out of 94 patients, males were 40 and females were 54. The mean age of onset of patients was 16.3 years, duration of AA was 12.1 years, number of episodes found to be single in 34 and multiple in 60 patients. 50 had patchy form, 24 had totalis and 20 had universalis. The psychiatric disorders in patients were alcohol or drug abuse in 45%, bulimia in 32%, obsessive-compulsive disorder in 12%, major depression in 14%, generalized anxiety disorder in 10%, psychosexual dysfunction in 4%, post-traumatic stress disorder in 7%, tobacco use disorder in 10%, panic disorder in 13%, dysthymic disorder in 7%, bipolar disorder in 3%, phobic disorder in 1%. The difference was significant ( $P < 0.05$ ). **Conclusion:** Alopecia areata patients had high incidence psychiatric disorders.

**Key words:** Alopecia areata, psychiatric disorders, bipolar disorder

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### INTRODUCTION

Psychosomatic (psychophysiological) medicine has been considered as a particular field of psychology and psychiatry for over 50 years. The history of this branch of medicine is very closely related with the theory of unity of body and mind. Disorders of mind and body and how these two parts of human beings function together is reflected in "The Diagnostic and Statistical Manual of Mental Disorders (DSM)," a criterion for classification of mental disorders.<sup>1</sup>

Alopecia areata (AA) is a common form of non-scarring hair loss with prevalence of about 2.1% seen in both genders.<sup>2</sup> The exact cause of this disorder is still not known. Factors such as genetic factors, autoimmune conditions, and environmental factors are hypothetical to play a significant role.<sup>1</sup> It is evident that stressful life events may precipitate AA hence, it is recommended that AA can be in the category of primary dermatologic disorders with psychiatric comorbidities or it can be regarded as a primary psychiatric disorder with dermatologic problems. Research has revealed that there is a significant relation between loss of hair and stress, stress intensity, and stressful events.<sup>3</sup>

There is also a very high rate of major depressive disorder (50%) in children and adolescents with AA.<sup>4</sup> Onset age of AA seems to play a role in its association

with different comorbid psychiatric diseases and an increased risk of depression was found in AA patients younger than 20 years old. Therefore, it is not a question that in patients with AA, evaluation of psychological status is of significant importance. Although AA is not painful or life threatening, its cosmetic aspects have profound negative influence on patients' psychological status and relationships.<sup>5</sup> The present study was conducted to determine pattern of psychiatric disorders in patients with Alopecia Areata.

### MATERIALS & METHODS

The present study was conducted among 94 patients of Alopecia Areata of both genders. They were enrolled once they agreed to participate in the study.

Patients' information such as name, age, gender etc. was recorded. An extensive thorough clinical and physical examination was performed. All were subjected to structured psychiatric interview based on the diagnostic interview schedule (DIS). It has questionnaire linked to history of personal and familial psychiatric, alopecia areata, and personal perceptions regarding the etiology. Factors such as age at onset, duration, form and number of episodes of AA in patients was recorded. Results were tabulated and subjected to statistical analysis with level of significance set below 0.05.

### RESULTS

**Table I Distribution of patients**

Total-94		
Gender	Males	Females
Number	40	54

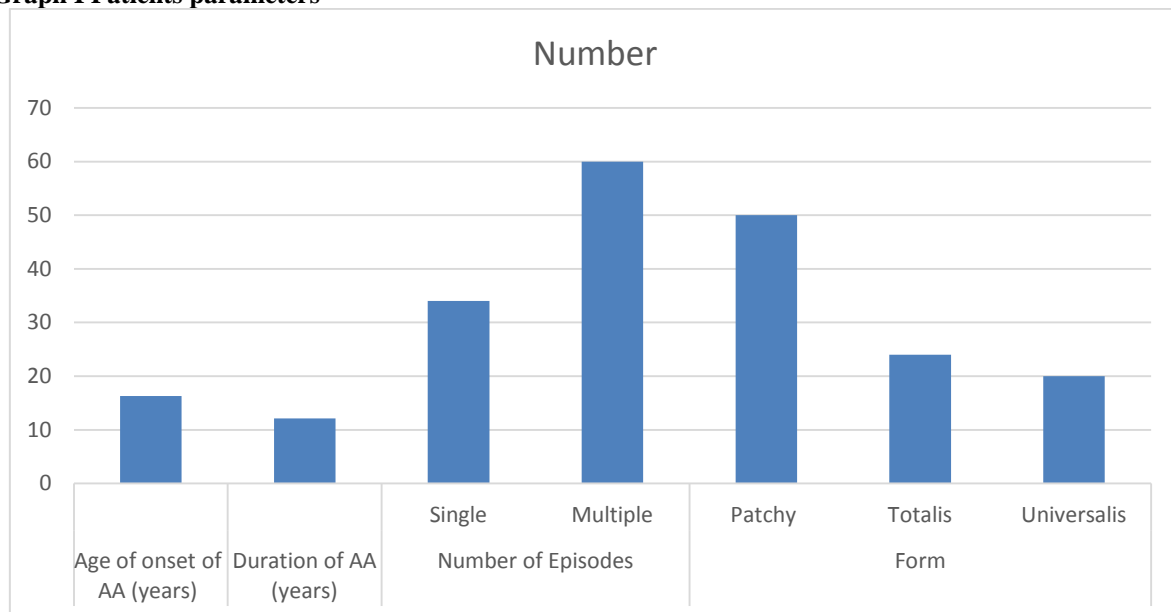
Table I shows that out of 94 patients, males were 40 and females were 54.

**Table II Patients parameters**

Parameters	Characteristics	Number	P value
Age of onset of AA (years)		16.3	-
Duration of AA (years)		12.1	-
Number of Episodes	Single	34	0.01
	Multiple	60	
Form	Patchy	50	0.04
	Totalis	24	
	Universalis	20	

Table II, Graph I shows that mean age of onset of patients was 16.3 years, duration of AA was 12.1 years, number of episodes found to be single in 34 and multiple in 60 patients. 50 had patchy form, 24 had totalis and 20 had universalis. The difference was significant ( $P < 0.05$ ).

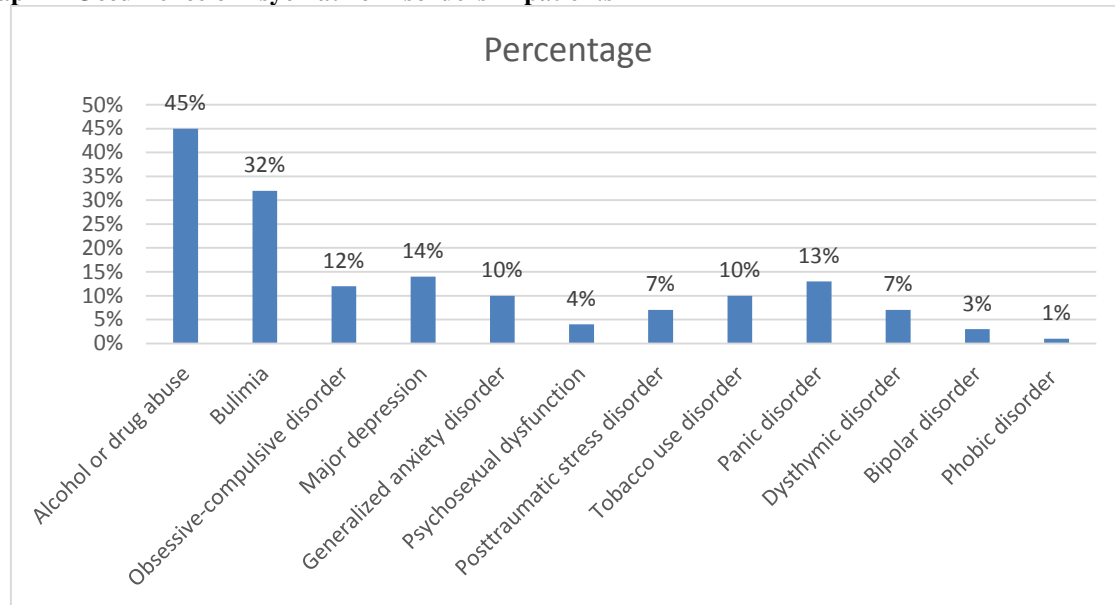
**Graph I Patients parameters**



**Table III Occurrence of Psychiatric Disorders in patients**

Psychiatric Disorders	Percentage	P value
Alcohol or drug abuse	45%	0.031
Bulimia	32%	
Obsessive-compulsive disorder	12%	
Major depression	14%	
Generalized anxiety disorder	10%	
Psychosexual dysfunction	4%	
Posttraumatic stress disorder	7%	
Tobacco use disorder	10%	
Panic disorder	13%	
Dysthymic disorder	7%	
Bipolar disorder	3%	
Phobic disorder	1%	

Table III, graph II shows that psychiatric disorders in patients were alcohol or drug abuse in 45%, bulimia in 32%, obsessive-compulsive disorder in 12%, major depression in 14%, generalized anxiety disorder in 10%, psychosexual dysfunction in 4%, post-traumatic stress disorder in 7%, tobacco use disorder in 10%, panic disorder in 13%, dysthymic disorder in 7%, bipolar disorder in 3%, phobic disorder in 1%. The difference was significant ( $P < 0.05$ ).

**Graph II Occurrence of Psychiatric Disorders in patients**

## DISCUSSION

Alopecia areata is a common chronic disease of skin with sudden onset loss of hair in a clear circular area. The role of psychological factors in extension of alopecia areata has also been discussed. Social and familial problems and uncontrollable events have more influences on these patients than on normal society and most of them experience psychological problems in long-term such as depression, anxiety, and paranoid disorders. Also, studies have shown that the low quality of life in these patients has significant relation with depression.<sup>6,7</sup>

The common site of occurrence is scalp followed by eyelashes, beard, pubic or general body hair may be affected in 10% of patients. Alopecia universalis involves the loss of all scalp and body hair. Patches of hair loss in alopecia areata are typically circumscribed, with smooth skin.<sup>8</sup> Exclamation-mark hairs ie breakage of the shaft of hair is the typical finding seen mostly around the margins of the patch. It has been evident that in 20% to 30% patients fail to recover from the original episode, thus prognosis is variable.<sup>9</sup> The present study was conducted to determine pattern of psychiatric disorders in patients with Alopecia Areata.

In this study, out of 94 patients, males were 40 and females were 54. Koo et al<sup>10</sup> determined that 74% of patients with alopecia areata (AA) under evaluation had one or more lifetime psychiatric diagnoses. Two hundred and ninety-four community-based patients with alopecia areata responded to a detailed questionnaire distributed by Help Alopecia International Research, Inc. The prevalence of psychiatric disorders was determined using diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R). Major depression, generalized anxiety disorder, social phobia, and paranoid disorder were all present in patients with

alopecia areata at rates significantly higher than in the general population.

We found that mean age of onset of patients was 16.3 years, duration of AA was 12.1 years, number of episodes found to be single in 34 and multiple in 60 patients. 50 had patchy form, 24 had totalis and 20 had universalis. Aghaei et al<sup>11</sup> conducted a study on 40 patients with alopecia areata and a 40 age-sex matched control group. Authors found a significant difference between the case and control group regarding the prevalence of depression, anxiety and neuroticism. There was no significant differences regarding extraversion, psychosis, and lying between the two groups. In alopecia areata involving the head, there was a significant relation only between neuroticism and lying. The facial involvement had a significant relation with depression ( $P$  value = 0.020), anxiety ( $P$  value = 0.019), and neuroticism ( $P$  value = 0.029). The frequency of psychological disorders in the case group is significantly greater than the control group.

We found that psychiatric disorders in patients were alcohol or drug abuse in 45%, bulimia in 32%, obsessive-compulsive disorder in 12%, major depression in 14%, generalized anxiety disorder in 10%, psychosexual dysfunction in 4%, post-traumatic stress disorder in 7%, tobacco use disorder in 10%, panic disorder in 13%, dysthymic disorder in 7%, bipolar disorder in 3%, phobic disorder in 1%.

Colon et al conducted a study on thirty-one patients with alopecia areata were administered a structured psychiatric interview (the Diagnostic Interview Schedule; DIS). Overall, 74% had one or more lifetime psychiatric diagnoses. Particularly noteworthy were the high lifetime prevalence rates of major depression (39%) and generalized anxiety disorder (39%). In addition, patients reported increased rates of psychiatric disorders in first-degree

relatives: anxiety disorders (58%), affective disorders (35%), and substance use disorders (35%). Patients with patchy alopecia areata were more likely to have a diagnosis of generalized anxiety disorder. No relationships were found between major depression and any variable characterizing alopecia areata history. Possible interrelationships between psychiatric disorders and alopecia areata are discussed. The study suggested that patients with alopecia areata are at increased risk for psychiatric disorders, and calls attention to the need for psychiatric assessment in this population.<sup>12</sup>

We conclude that patients with AA could experience changes in their QoL and signs of depression, anxiety, and suicide risk, mainly in the adult population, during the course of the disease.

### CONCLUSION

Authors found that Alopecia areata patients had high incidence psychiatric disorders.

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