

Psychological Impact of Alopecia Areata on Egyptian Patients

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ABSTRACT

Alopecia occupies an important place in psychiatric comorbidity and may be associated with anxiety, stress and depression. Psychiatric problems are more common in patients with alopecia than in healthy individuals. This study aimed to assess the psychological impact of Alopecia Areata (AA) among Egyptian patients by using the Arabic version of the Depression, Anxiety and Stress Scale (DASS-42).

Patients and methods: A total of 100 Egyptian patients with AA were randomly recruited from the outpatient clinics of the department of dermatology of Assiut University Hospital (AUH). The SALT score used to assess the severity of AA. Patients were asked to describe the impact of AA on their life by filling in the Arabic version of DASS-42.

Results: 71% of the AA patients were males and 29% were females, 93% were educated either higher education 46% or lower education 47%. The patients of AA who had depression were 90 patients (26% with extreme depression, 22% with severe depression, 29% with moderate depression and 13% with mild depression). Also, anxiety was present in 85% of patients (38% with extreme anxiety, 24% with severe anxiety, 18% with moderate anxiety and 5% with mild anxiety). Regarding stress, it was present in 95% of patients (35% with extreme stress, 23% with severe stress, 32% with moderate stress and 5% with mild stress).

Conclusion: Our study may serve as a stimulus to dermatologists to improve the relationships with their patients and re-evaluate their management of AA and put in consideration the psychological management that can help to improve the clinical outcomes in Egyptian patients with AA.

Keywords: Alopecia areata; Depression; Anxiety; Stress

INTRODUCTION

AA is a common chronic autoimmune condition characterized with sudden onset of hair loss in a clear circular area. Alopecia means 'baldness or loss of hair' and areata means 'occurring in patches' [1]. It may affect the pilosebaceous unit in both males and females and has no racial predilection. It usually affects the scalp, but any hair-bearing area can be involved. The clinical picture may vary from a single patch of non-scarring hair loss, to multiple patches or loss of hair on the entire scalp (alopecia totalis), or the whole body (alopecia universalis) [2]. The skin of the affected patches appears usually normal and smooth; rarely a slightly pinkish color can be observed [3].

One of the most common anxiety disorders in AA patients is generalized anxiety disorder (GAD), which occurs in 39% of patients suffering from AA. Patients with GAD frequently report constant feeling of nervousness, anxiety and muscle tension, heart palpitations and dizziness. Patients with GAD often express fear of the disease or its recurrence [4].

Since hair is a vital part of the body, hair loss might have negative effects on patients' quality of life. The different look, usually in patients with visible bald patches, may cause low self-esteem and body disfigurement. As a chronic disease, it can affect social activity, self-perception and emotional well-being [5]. The frequent occurrence of extensive alopecia may lead to significant mental disorders caused by social isolation and also the lack of acceptance of one's own appearance [6].

Patients with AA feel social neglect and rejection, often do not accept their disease, and are tired of continuous discomfort associated with chronic dermatological condition [7]. Personal and social problems are frequent among AA patients. Chronic course of AA is associated with exposure to chronic stress. Patients with AA often confirm the negative impact of stressful life events on

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the course of the disease [7,8]. Emotional stress is one of the risk factors of AA and is associated with either actual or symbolic hair loss [8].

The aim of this study was to assess the psychological impact of AA among Egyptian patients by using the Arabic version of DASS-42.

PATIENTS AND METHODS

This cross-sectional study was conducted at the department of Dermatology, Venereology and Andrology, Assiut University Hospitals, Assiut, Egypt. The study was approved by the Assiut University Medical Ethics committee and was carried out in accordance with the guidelines of the Helsinki Declaration. All patients signed informed consent prior to the study.

A total of 100 Egyptian patients with AA were randomly recruited from the outpatient clinics of the department. They were enrolled in the study after signing an informed consent. Inclusion criteria included Egyptian patients with AA aged \geq 16 years old, both sex and all clinical types of AA (monolocularis, multilocularis, totalis and universalis). Exclusion criteria included patients with any associated chronic dermatological diseases such as psoriasis, vitiligo, pemphigus and systemic lupus erythematosus and noncooperative patients.

A detailed history was taken from all patients regarding age, sex, occupation, marital status, residence, educational status, special habits as smoking, duration of the complaints, site of the lesions, onset, course, possible causes, precipitating factors, family history and other associated diseases. Observation for the presence or absence of veil, head cover or cap. A full dermatologic examination was performed to determine the number, site, shape, extension of the sites affected by AA, and the type of AA; And to assess the percentage of scalp hair loss and the severity of AA by SALT score (the Severity of Alopecia Tool) [9]. All the data were filled in specific designed sheets. All patients were face to face interviewed, they were asked to describe the impact of AA on their life by filling in the Arabic version of DASS-42 [10,11].

Statistical analysis

All analyses were carried out using using SPSS version 21. Simple frequencies were used for data checking and cleaning. Data were presented as number, percentage, mean and standard deviation. The mean, standard deviation for the DASS-42 score were estimated. A P-value ≤ 0.05 was considered statistically significant.

RESULTS

Patients' demographics

The demographic data of a total 100 Egyptian patients with AA were summarized in Table 1. The age of patients ranged from 16 to 59 years with a mean \pm SD=27.58 \pm 9.7 years and (71%) of the patients were males. The majority of the patients (56%) were unmarried, (57%) were residents in rural areas of Assiut, and (58%) were workers. Regarding their education, (47%) of the patients with lower education and (46%) with higher education.

Table 1: Socio-demographic data of the studied	cases
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Variable	Category	n=100
A ·	Mean ± SD	27.58 ± 9.7
Age in years	Median (Range)	27 (16-59)
C	Male	71 (71%)
Sex	Female	29 (29%)

	Illiterate	7 (7%)
Educational level	Lower education	47 (47%)
	Higher education	46 (46%)
Martial	Married	44 (44%)
Marital status	Unmarried	56 (56%)
	Working	58 (58%)
Occupation	Non-working	42 (42%)
D 1	Urban	43 (43%)
Kesidence	Rural	57 (57%)
0 11	Smoker	57 (57%)
Smoking status	Non-smoker	43 (43%)

The clinical characteristics of the studied cases are presented on Table 2. The family history of AA was positive only in 12% of the patients. The majority of the patients had acute (sudden) onset of AA (85%) and progressive course (69%). (59%) of patients wear a head cover. Stress as an exacerbation factor of the disease was positive in (83%) of the patients. It was found that the most common type of AA in our patients was AA multilocularis (59%) followed by AA monolocularis (36%). The severity of AA was assessed by the SALT score as shown in Table 3. The mean of SALT score was 14.43 \pm 24.9.

Table 2: Clinical characteristics of the studied cases.

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Variable	Category	n=100
Es an the history	No	88 (88%)
ramily history	Yes	12 (12%)
Disease duration in	Mean ± SD	17.72 ± 28.1
months	Median (Range)	6 (0.25-192)
Disease duration	<6 months	58 (58%)
category	≥ 6 months	42 (42%)
D	Acute (Sudden)	85 (85%)
Disease onset	Gradual	15 (15%)
	Stationary	13 (13%)
D	Intermittent	17 (17%)
Disease course	Regressive	1 (1%)
	Progressive	69 (69%)
II. 1	Yes	59 (59%)
Head cover	No	41 (41%)
<u>Craws</u>	Negative	17 (17%)
Stress	Positive	83 (83%)
	Mono-	36 (36%)
Type of AA	Multilocularis	59 (59%)
	Totalis	3 (3%)
	Universalis	2 (2%)
CALT	Mean ± SD	14.43 ± 24.9
SALI score	Median (Range)	5 (1-100)
Tanatanant	Yes	89 (89%)
Treatment	No	11 (11%)

 Table 3: Distribution of the studied cases into SALT score subclasses

 according to the percentage of hair loss.

SALT subclasses	n=100
S0=no hair loss	0
S1=25% hair loss	88
S2=25%-49% hair loss	4
S3=50-74% hair loss	2

Abou-Taleb DA, et al.

S4=75-99% hair loss	1
S5=100% hair loss	5

Assessment of the psychological impact of AA among egyptian patients by using the arabic version of DASS-42

According to the Arabic version of DASS-42, the patients of AA who had depression were 90 patients (26% with extreme depression, 22% with severe depression, 29% with moderate depression and 13% with mild depression). Also, anxiety was present in 85% of patients (38% with extreme anxiety, 24% with severe anxiety, 18% with moderate anxiety and 5% with mild anxiety). Regarding stress, it was present in 95% of patients (35% with extreme stress, 23% with severe stress, 32% with moderate stress and 5% with mild stress) as shown in Tables 4.

Table 4: Assessment of the psychological impact of AA among Egyptianpatients by using the Arabic version of DASS-42.

	Depression n (%)	Anxiety n (%)	Stress n (%)
Extremely	26 (26%)	38 (38%)	35 (35%)
Severe	22 (22%)	24 (24%)	23 (23%)
Moderate	29 (29%)	18 (18%)	32 (32%)
Mild	13 (13%)	5 (5%)	5 (5%)
No	10 (10%)	15 (15%)	5 (5%)

The mean of the DASS-42 score was higher in female patients (58.38 \pm 12.3) than males (56.03 \pm 13.8) with a significant statistical difference (P-value=0.024), and was also higher in rural (71.63 \pm 24.6) than urban (60.14 \pm 24.6) with a significant statistical difference (P-value=0.019) as shown in Table 5.

Table 5: Socio-demographic characteristics and DASS-42.

37 + 11	DASS-42
Variables	Mean ± SD
Age group	5 (5%)
<40 years	65.90 ± 24.4
≥ 40 years	74.67 ± 31.4
P-value	=0.319*
Sex	5 (5%)
Female	75.48 ± 22.4
Male	63.10 ± 25.3
P-value	=0.024*
Marital status	5 (5%)
Married	65.73 ± 27.7
Unmarried	67.45 ± 22.9
P-value	=0.702*
Occupation	5 (5%)
Working	62.95 ± 25.5
Non-working	71.86 ± 23.7
P-value	=0.088*
Educational Level	5 (5%)
Illiterate	74.00 ± 28.2
Lower Ed.	65.77 ± 24.1
Higher Ed.	66.52 ± 25.9
P-value	=0.722**
Residence	5 (5%)
Urban	60.14 ± 24.6
Rural	71.63 ± 24.6
P-value	=0.019*
Smoking Status	5 (5%)

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Non-smoker	65.02 ± 25.4
Smoker	67.95 ± 24.9
P-value	=0.566*

*T-test analysis was used to compare mean differences among groups

**One-way ANOVA was used to compare mean differences among groups The mean of the DASS-42 score was higher in patients with head cover (76.47 \pm 21.9) than without head cover (52.61 \pm 22.5), in stressed patients (70.55 \pm 24.1) than non-stressed (47.82 \pm 21.4) with significant statistical differences (P-value<0.001).

Moreover, it was higher with disease duration \geq 6 months (72.72 ± 24.2) than in disease duration <6 months (59.89 ± 24.5) with a significant statistical difference (P-value<0.001).

DISCUSSION

Hair represents an important sign of health and vitality. Long time ago dermatologists searched for etiology and treatment for alopecia [12]. AA is a common chronic autoimmune condition presented with sudden onset of loss of hair in a clear circular area [1,2]. It is a common cause of non-scarring alopecia that occurs in a patchy, confluent or diffuse pattern. It involves loss of hair from any hairy areas of the body, usually from the scalp [13].

Hair is a vital part of the body; hair loss might have negative effects on patients' quality of life. The different look, in patients with AA may cause low self-esteem and cosmetic disfigurement. AA as a chronic disease, it may affect social activity, self -perception, economic state and feelings [5-7]. Moreover, AA can have psychosocial complications, including depression, low self-esteem, altered self-image, and less frequent and enjoyable social engagements. To assess the severity of AA, quality of life seems to be a more relevant criterion than clinical evaluation such as AA extension because the perception of patients may differ significantly from those of their health-care providers [14].

AA has been linked to negative psychosocial consequences such as emotional pain and suffering, negative effects on daily lifestyle, functions and physical symptoms brought on by the condition or caused by treatments which may result in distressing sideeffects. Isolation and withdrawal may lead to increased feelings of depression, stress and anxietyin patients with AA [15,16].

In our study despite of the number of patients with AA was higher in males than females (71%), the mean of DASS-42 was higher in females (75.48 \pm 22.4) than males (63.10 \pm 25.3) with a statistically significant difference (p-value=0.024). This indicates that the affection of depression, anxiety, and stress were more predominant in female patients with AA. This may be due to the importance of hair loss to them and the impact of hair loss on their appearance.

We recommend that patients with AA should be encouraged to discuss their psychological complaints at clinic visits. Certain interventions such as: Counseling, psycho-education, and psychotherapeutic interventions to reduce the psychological impact of AA should be considered in their treatment.

CONCLUSION

The Arabic version of DASS-42 assesses the psychological impact of AA on Arab patients. It is very important that dermatologists improve the relations with their patients and re-evaluate their management of AA and take in consideration the patients' counseling and psychological management that can help to improve the clinical outcomes of AA.

CONFLICT OF INTEREST

There is no conflict of interest to be reported by any of the authors.

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