



Contents lists available at ScienceDirect

International Journal of Women's Dermatology



Original Research

Quality of life in mild and severe alopecia areata patients

Robabeh Abedini^a, Zahra Hallaji^a, Vahideh Lajevardi^a, Maryam Nasimi^{a,*},
Mona Karimi Khaledi^b, Hamid Reza Tohidinik^c

^a Autoimmune Bullous Disease Research Center, Department of Dermatology, Razi Hospital, Tehran University of Medical Sciences, Tehran, Iran

^b Tehran University of Medical Sciences, Tehran, Iran

^c School of Public Health, Gonabad University of Medical Sciences, Gonabad, Iran

ARTICLE INFO

Article history:

Received 1 February 2017

Received in revised form 5 April 2017

Accepted 3 July 2017

Available online xxxx

Keyword:

Alopecia areata
quality of life
DLQI

ABSTRACT

Background: Alopecia areata is a relapsing hair disorder characterized by a sudden hairloss and has a considerable impact on patient's quality of life. The goal of this study was to determine quality of life among patients with mild and severe forms of alopecia areata and compare the two groups.

Methods: During one year, 176 patients (96 mild, 80 severe) were selected and asked to complete Dermatology Life Quality Index (DLQI) questionnaires.

Results: Our study revealed that the severe group was predominantly female and had higher amount of unemployment, more prolonged disease duration, unstable disease course and facial involvement. The mean DLQI scores in the severe and mild groups were 10.7 ± 7.5 and 5.4 ± 6.8 , respectively which was significantly different and severe group had higher DLQI scores and more quality of life impairment. As well, there was a significant association between total DLQI scores and acute stress during last 6 months.

Conclusions: Our study confirms that alopecia areata considerably impacts quality of life and this is more pronounced in patients with severe disease and those who had acute stress recently.

© 2017 Published by Elsevier Inc. on behalf of Women's Dermatologic Society. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Introduction

Alopecia areata (AA) is a relapsing, non-scarring and immune-mediated form of hair loss that occurs in all ethnic groups, ages, and both sexes, with an estimated lifetime risk of 1.7% among the general population (Villasante Fricke and Miteva, 2015).

Some authors reported an increased prevalence of psychiatric disorders in AA, especially anxiety and depression, others concluded that these comorbidities are less important (Gulec et al., 2004). Another controversial issue is that whether stressful life events are able to trigger episodes of AA. However it can be assumed that even if stressful life events play a minimal role in the triggering of AA, anxiety and depression due to this chronic disorder could negatively affect disease course via stress mediators (Matzer et al., 2011).

It has been described that the disease has a considerable impact on patient's quality of life (QoL). This is due to the visibility of this disorder, which affects patient's appearance, emotional health and

social communications (Fabbrocini et al., 2013; Ruiz-Doblado et al., 2003). So, QoL determination has become increasingly important in assessing AA severity and impacts (Dubois et al., 2010).

There are now several dermatology-specific questionnaires such as Skindex (Finlay and Khan, 1994), Dermatology Life Quality Index (DLQI) (Finlay and Khan, 1994), Dermatology Quality of Life Scales (Morgan et al., 1997), and Dermatology Specific Quality of Life (Anderson and Rajagopalan, 1997).

The goal of this study was to determine QoL among patients with mild and severe forms of AA and compare the two groups. In this way, we used DLQI questionnaire that is the most cited tool due to its high degree of reliability, applicability and reproducibility (Morgan et al., 1997).

Materials and methods

The study was approved by the Ethic Committee of Tehran University of Medical sciences.

From October 2013 until October 2014 from 200 patients with definite diagnosis of AA, 80 severe (alopecia totalis, universalis and ophiasis) and 96 mild (less than 25% of scalp hairloss) AA patients over the age of 16 who were randomly selected from the outpatient

* Corresponding author: Maryam Nasimi, Autoimmune Bullous Disease Research Center, Department of Dermatology, Razi Hospital, Tehran University of Medical Sciences, Tehran, Iran. Tel.: +98 2155618989.

E-mail address: Nsm.maryam@gmail.com (M. Nasimi).

¹ Razi Hospital- Vahdate Eslami Street- Tehran- Iran, 1199663911.

clinic of Razi Hospital accepted to participate in the study and were asked to complete questionnaires.

The questionnaires consisted of two parts: the first part which was fulfilled by physician, including questions about gender, age, family history of AA, disease duration, educational state, acute stress during last 6 months, disease course (course of the disease was defined as "unstable" if there was alternation of worsening and improvement phases in the last 2 years, and "stable" otherwise), facial hairloss, occupation (currently working and currently not working) and other illnesses (thyroid disease, diabetes mellitus, atopy); the second part included questions measuring DLQI.

DLQI, which was introduced by Finlay and Khan (1994), is a self-explanatory survey which consists of ten questions. The DLQI is calculated by summing the score of each question resulting in a possible score of 0 to 30. The higher the score, the more QoL is impaired. The valid Persian version was used for measuring patient's QoL (Aghaei et al., 2004).

The questions can be classified under 6 headings items: symptoms and feelings (questions 1- 2), daily activities (questions 3- 4), leisure (questions 5- 6), and personal relationships (questions 8- 9) each item with maximum score 6; work and school (question 7), and treatment (question 10) each item with maximum score 3.

In order to help the clinical interpretation of the DLQI scores a banding system has been validated. According to this system, DLQI scores 0-1 = no affect at all, 2-5 = small effect, 6-10 = moderate effect, 11-20 = very large effect and DLQI score of 21-30 = extremely large effect on patient's life.

For statistical analysis the SPSS version 16 was used. Continuous variables were described using Mean, Standard Deviation (SD). Categorical variables were reported as frequencies and percent. For comparison of continuous variables, we used independent samples t-test for normally distributed data and non-parametric Mann-Whitney U test for variables showing skewed distribution. For qualitative variables the Chi-square test was used for each contingency table. The correlation between continuous variables was assessed using Pearson's and Spearman's correlation coefficients. Variables with P-value < 0.2 were included in multivariable linear regression model to adjust the effect of potentially confounding factors. In all analyses two-tailed P < 0.05 was considered statistically significant.

Results

One hundred seventy-six patients participated in this cross-sectional study. Ninety six (54.5%) mild AA patients (84 men and 12 women) with mean age of 31.2 years (19 to 63 year) and 80 (45.5%) severe AA patients (29 men and 51 women) with mean age of 31.6 (16 to 62 year) were included. The mean AA duration was 10.17 ± 25.4 months in mild group (1 to 240 months) and 77.7 ± 82.5 in severe group (2 to 324 months) which was significantly different ($P < 0.001$).

Disease course was stable in 78 subjects in mild group, but it was stable in 41 and unstable in 39 subjects of severe group (Table 1). So, disease course was significantly unstable in the severe group ($P < 0.001$).

There were also significant differences between two groups from the viewpoint of sex, occupational status, facial involvement and other associated disorders (Table 1), revealing that severe group was predominantly female ($P < 0.001$) and had higher amount of unemployment ($P < 0.001$) and facial involvement ($P = 0.03$), as well, frequency of thyroid disease, diabetes mellitus and atopy was significantly higher ($P = 0.001$).

The total DLQI scores of all participants were between 0 and 28 and the mean was 7.9 ± 7.6 (Table 2). The distribution of patients according to banding system of DLQI was shown (Figure 1). The mean DLQI scores in the severe and mild groups were 10.7 ± 7.5

Table 1
Basic information of mild and severe alopecia areata patients

	Mild AA N = 96 N (%)	Severe AA N = 80 N (%)	P-value ¹
Sex			
Male	84(87.5%)	29(36.3%)	
Female	12(12.5%)	51(63.8%)	<0.001
Family history			
Yes	15(15.6%)	8(10%)	
No	81(84.4%)	72(90%)	0.27
Acute stress ²			
Yes	55(57.3%)	48(60%)	
No	41(42.7%)	32(40%)	0.71
Educational level			
Under diploma ³	27(28.1%)	30(37.5%)	
≥ diploma	69(71.9%)	50(62.5%)	0.18
Occupational status			
Not working	19(19.8%)	47(58.8%)	
Working	77(80.2%)	33(41.3%)	<0.001
Other disease ⁴			
Yes	3(3.1%)	16(19%)	
No	93(96.9%)	64(81%)	0.001
Disease course ⁵			
Stable	78(81.3%)	41(51.3%)	
Unstable	18(18.8%)	39(48.8%)	<0.001
Face involvement ⁶			
Yes	61(63.5%)	63(78.8%)	
No	35(36.5%)	17(21.3%)	0.03
Age ⁷	31.21 ± 8.2	31.6 ± 10.07	0.78
Disease duration ^{7,8}	10.1 ± 25.3	77.7 ± 82.5	<0.001

¹ Chi-square test was used for categorical variables and independent samples T-test for continuous variables.

² Acute stress during last 6 months

³ diploma = high school degree

⁴ Autoimmune thyroid disease, diabetes mellitus, atopy

⁵ Course of the disease was defined as "unstable" if there was alternation of worsening and improvement phases in the last 2 years, and "stable" otherwise.

⁶ Eyebrow/eyelash/beard area

⁷ Mean ± SD.

⁸ Logarithm of duration was used for analysis.

and 5.4 ± 6.8 respectively, which was statistically significant ($P < 0.001$). The mean score in the male group was 6.8 ± 7.4 and in the female group was 9.6 ± 7.6 which was statistically different ($P = 0.02$). There was a significant association between total DLQI scores and disease duration ($P < 0.001$) and acute stress during last 6 months ($P = 0.02$).

The total DLQI scores of patients did not differ from each other according to their age, family history of AA, educational level, occupation status, other associated diseases, disease course and facial involvement (P values > 0.05).

Table 3 shows that after adjustment in multivariable analysis, only suffering from severe type of disease and having acute stress during last 6 months significantly increased the total scores of DLQI.

Discussion

AA is a chronic and relapsing disorder which seriously affects patient's QoL by interfering with personal relationships and self-perception (Fabbrocini et al., 2013). The correlation between AA and psychological disorders is reciprocal; on one side psychiatric disorders can be considered as a trigger for initiation or exacerbation of AA (Brajač et al., 2003; Gulec et al., 2004) and on the other side the disease itself, through its negative impacts on patient's QoL, causes psychological problems (Picardi et al., 2003; Reid et al., 2010)

This study highlights the impact of AA on patient's QoL especially severe cases and the importance of psychological evaluation of these patients.

Download English Version:

<https://daneshyari.com/en/article/8712545>

Download Persian Version:

<https://daneshyari.com/article/8712545>

[Daneshyari.com](https://daneshyari.com)