The Psychiatric Aspects of Alopecia Areata

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Abstract: Alopecia areata (AA) refers to noncicatricial hair loss. It is defined as a secondary psychiatric disorder in the classification of psycho dermatological disorders. Its profound effect on a person's physical appearance and the resulting emotional stress have led many researchers to investigate psychiatric aspects of AA in recent decades [1, 2]. This study presents a review of the literature and highlights psychiatric aspects of AA. The results showed that both pediatric and adult patients with AA have a high risk of depression and anxiety. Dermatologists should consider a psychiatric evaluation of female patients under 20 years with AA to detect potential depression and anxiety. As much as alexithymia also in association of AA and other psychiatric disorders, such as schizophrenia, obsessive-compulsive disorder (OCD), personality, manic, bipolar, attention deficit, phobic disorders, further investigations are needed. The evaluation of the psychological status of patients with AA is extremely important to aid the well-being of individuals suffering from this disease.

Keywords: Alopecia areata, Psychiatry, Association.

INTRODUCTION

Alopecia areata (AA) commonly presents as round or oval patches of noncicatricial hair loss. Other presentations of AA may include the loss of all scalp hair, loss of all body hair, and loss of hair in a band-like pattern (ophiasis) along the temporal and occipital scalp [1, 2]. The prevalence of AA is approximately 0.2%, and the lifetime incidence is about 2.1% [1, 2]. It can be diagnosed both in pediatric and adult patients. Although the etiology of AA is unclear, genetic factors, autoimmunity, and environmental factors are thought to play important roles in the disease [3-5]. In histopathological evaluations, lymphocytic infiltration of T cells around and within the hair bulb region of anagen follicles are found. According to the unpredictable course of the disease, treatment options vary from topical to systemic treatments [6].

Psychodermatology refers to any aspect of dermatology in which psychological factors play a significant role. In the classification of psychodermatological disorders, AA is defined as a secondary psychiatric disorder in which the patient develops psychological problems as a result of a skin disease that causes physical disfigurement [7]. Given the profound effect of AA on a person's physical appearance and the resulting emotional stress, which is accepted as one of the environmental factors in the etiology of this disease, many researchers have investigated psychiatric aspects of the disease in recent decades [6]. Numerous studies have investigated personality traits and the psychopathology of patients with AA, as well as the effects of psychopathology on the symptom severity of the disease. The lifetime prevalence of any psychiatric disorder has been estimated at approximately 74% among patients with AA [8]. This study presents a review of the literature on AA and highlights psychiatric aspects of the disease.

Personality Traits

Several studies have investigated whether psychiatric disorders or personality traits predict AA. Alfani *et al*. compared the personality traits of AA patients and healthy controls with the Minnesota Multiphasic Personality Inventory [9]. They revealed that AA patients appeared to experience more depressive, hysterical, and anxiety feelings. They also pointed out that patients with AA had more hypochondriac tendencies and were more in conflict with their social environment. However, Carrizosa *et al*. found no differences in the personality traits of patients with AA compared to those with other dermatological diseases [10]. Two studies used the Temperament and Character Inventory to investigate the personality traits AA patients [11, 12]. One of the studies found no difference between AA patients and healthy controls, but the other reported that patients with AA had low novelty seeking, reward dependence, and self-transcendence scores compared to those of healthy controls.

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Depression and Anxiety

Depression and anxiety are the most frequent comorbid psychiatric disorders associated with AA in the English literature. The estimated lifetime prevalence of major depression and anxiety was reported to be 39% in AA patients [8]. In a nationwide analysis and comparison of 5117 AA patients and healthy controls from Taiwan, Chu *et al*. reported that patients with AA had an increased risk of anxiety and depression [13]. They also reported that major depressive disorder was associated with AA in those younger than 20 years. Several other studies found similar results [14-17]. In a retrospective cross-sectional study of the prevalence of comorbid conditions among 2115 patients with AA during an 11-year period, Huang *et al*. reported that 25.5% of the patients had depression or anxiety [18]. In a recent study, Aghaei *et al*. assessed the frequency of psychological disorders in patients with AA in comparison with that in healthy controls [19]. They reported that depression and anxiety were significantly higher in the patients with AA. Further, they suggested that the social background of the patients, such as having a lower educational level, might have influenced these findings. Supporting previous results, they mentioned the correlation between localization of deformation in this case AA lesions, such as face involvement and higher rates of depression and anxiety [20, 21]. Despite the high prevalence of depression and anxiety among patients with AA, another study of the prevalence of "wishing to be dead" and having acute suicidal thoughts among individuals with cosmetically disfiguring dermatological disorders found that none of the patients with AA had suicidal ideation [22]. A recent study of children with AA showed a positive relationship with the presence of AA and depression scores [23]. In this report, conflicting with previous data, only the state of anxiety score had a significant association with AA in the adolescent group. The higher prevalence of psychiatric morbidity among women with dermatological disease is well known. However, there are conflicting data in the literature on the association of AA with depression and anxiety according to the sex of the individual [24-26]. Nevertheless, in several reports, researchers found a female predominance of depression and anxiety in patients with AA [25, 26].

Alexithymia

The data on the association of AA and alexithymia are conflicting [27, 28]. Sayar *et al*. reported that 58% of male patients (*n*=31) were alexithymic according to the Toronto Alexithymia Scale (TAS) [29]. In a comparison of patients with AA and healthy controls, Cordan Yazici *et al*. reported that patients with AA had higher TAS scores [30]. On the other hand, in a similar study, Picardi *et al*. reported no difference [31]. Parallel to the findings of Picardi *et al*.'s study, in a recently published report, Sellami *et al*. showed no significant difference in alexithymia between patients with AA and healthy controls [24, 31].

Other Psychiatric Diseases

Schizophrenia and obsessive-compulsive disorder (OCD), in addition to personality, manic, bipolar, attention deficit, and phobic disorders, have been reported in several case reports in a limited number of patients. Considering the limitations of these, data for these disorders are more beyond the proof of association between AA and them. In one study, Chu *et al*. compared the prevalence of these disorders in patients with AA and healthy controls and reported no significant difference in the prevalence among those with AA [13]. Interestingly, Chu *et al*. found an association between AA and OCD among those who were younger than 20 years. A different study showed that children with AA had more difficulties in concentration than those without AA [23].

According to the current literature presented above, we can conclude that both pediatric and adult patients with AA have a high risk of depression and anxiety. The data also suggest that dermatologists should consider a psychiatric evaluation of female AA patients who are younger than 20 years to detect depression and anxiety. The data on the association of AA with alexithymia are conflicting. More studies are needed to elucidate the association of AA with alexithymia and other psychiatric disorders, such as schizophrenia and OCD, in addition to personality, manic, bipolar, attention deficit, and phobic disorders. Based on this review of the current literature, evaluations of the psychological status of patients with AA are extremely important to aid the well-being of individuals suffering from this disease.

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Received on 25-11-2014 Accepted on 6-12-2014 Published on 31-12-2014