

Psychological aspects of Alopecia Areata

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ABSTRACT

Alopecia areata is a chronic probable auto immune skin disorder characterised by hair loss over the body. Though its psychological status has been debated over the ages presently we have research that points towards a psychosomatic causation of the disorder. The present review paper looks at the psychological factors in alopecia areata, the various studies and prevalence of psychiatric problems in this population. The approaches to treatment have not been laid out via rigorous studies or clinical trials and have to be decided on a case to case basis. Along with medication a large number of psychological interventions for both the patient and the family shall be useful in the management of this condition. There is a need for dermatologists to liaison with mental health professionals when it concerns the long term and holistic management of alopecia areata.

Key words : *Alopecia areata, psychodermatology, psychological factors, alopecia.*

INTRODUCTION

Alopecia Areata (AA) is a chronic inflammatory non scarring skin condition that leads to patchy hair loss over the scalp and can progress to diffuse hair loss all over the body [1]. Spontaneous regrow of hair and subsequent relapse is also known. It occurs in 60% cases before the age of 20 years and a family history of the illness is seen in 20% cases [2]. It is often associated with autoimmune disorders like vitiligo, pernicious anemia and diabetes though an autoimmune basis of its own etiology is unproven [3].

The role of psychological factors and skin diseases has always been studied. The entity of psycho-cutaneous disorders where psychological factors may affect skin disease and the converse also holds true is well known for many skin disorders like psoriasis, acne, alopecia areata and other debilitating skin disorders [4]. In the present

paper we focus on psychological issues in alopecia areata and the various studies done on the same. The realm of psychological factors has moved even from skin to hair and today we have literature that supports the evidence for psychotrichology a branch that elucidates the role of psychological and psychosocial as well as psychosomatic factors in hair disorders [5].

METHOD OF CONDUCTING THIS REVIEW

For the purpose of this review the search methods included using databases like Medline, Pubmed and Google scholar. Words like alopecia areata, psychological issues in alopecia areata, depression in alopecia areata and other similar notations were searched for and original research papers, review articles as well brief communications and case reports were analysed. Authors were contacted for full text of many papers. The search yielded a total of 212 different papers and articles where subjects were less than 20 and methodologies were doubtful were rejected. A total of 129 papers were reviewed for this paper. Of these 12 were related review papers and the rest were original research articles. Only 2 reviews on the subject were available while 10 were review papers on overlapping subjects. Individual studies have not been reviewed as most findings were similar but rather a synthesis of findings across various papers has been presented in this article. This has been supplemented with clinical experiences we have in working in liaison with the dermatology department of a tertiary general hospital in Mumbai. We were unable to locate any meta-analysis with regard to the topic of this review. In fact the workdone in this area is so varied that such an analysis is probably never possible.

PSYCHOSOMATIC MODEL FOR ALOPECIA AREATA

Alexithymia is a phenomenon that has been described as a personality trait characterised by difficulty in differentiating, describing and labelling emotions. It is the core psychology construct that has been implicated in psychosomatic disorders [6]. Though associations between dermatological disorders and alexithymia are scarce, a growing evidence indicates its role in various skin disorders like vitiligo, psoriasis, alopecia areata, urticaria and atopic dermatitis [7]. The trait of alexithymia has been linked to insecure childhoods with adverse parenting and traumatic childhood experiences [8].

Over the years our understanding of the etiopathogenesis of alopecia areata has evolved as a polarized dichotomy between the mind and the body and it is only of late that we are able to envisage a connection between the two. Literature is abundant with papers of sudden hair loss during stress and concomitant psychological and psychosocial determinants of alopecia areata [9]. The psychological implications of alopecia areata range from the role of life events implicated in its causation to the presence of depression and anxiety along with disruption in family functionality and adverse effects on health related quality of life [10]. It is well known that alopecia areata is affected by the endocrine and immune systems and we have literature that supports the role of psychological factors in the modulation of these systems and the causation of autoimmune disorders [11]. The role of stress in these disorders is well known and data has provided us evidence that psychological factors play a role in precipitating alopecia areata [12].

ANXIETY, STRESS AND DEPRESSION IN ALOPECIA AREATA

Stress is a wide construct and researchers have varying definitions of what constitutes stress. Researchers also vary in what are momentary or long term endured stresses [13]. This makes it difficult to interpret findings from research papers on the subject and most studies take no cognizance of intrapsychic and various individual trajectories that may be at play in the individual patient [14]. Anxiety and depression have been reported widely across various studies in patients with alopecia areata. The range of patients affected by the disorders are 30-80% across studies [15-18]. Varied prevalence can be attributed to differences in patient population and varied scales and their cut offs used in the diagnosis [18]. Most of the studies are post disease appearance and pre and post comparisons are not possible as longitudinal studies are not reported [19]. Feelings of insecurity and inferiority along with passivity in response to emotions has been reported in this patient population [20]. Many case studies have reported tracing the problem to adverse childhood experiences and developmental perspectives have been elucidated [21]. Long term chronic endurance of stress is a common factor compared to recent trauma while precipitation of alopecia areata by a fresh traumatic event has been reported across studies [22]. Suicidal tendencies have been reported in 5 to 15 % cases across studies [23]. Children with alopecia areata report negative events in childhood and traumatic events perceived as a loss [24]. This loss was a major threat to the child and often precipitated onset of the disorder. Children with alopecia areata have reported more anxiety and depression than normal controls coupled with greater emotional problems. Early stress often leads to the development of a personality pattern that makes one more vulnerable to further stress and thus primes the internal organs including the skin and scalp to develop stress induced disorders [25].

PERSONALITY PROFILES IN ALOPECIA AREATA

Alopecia areata patients have a characteristic personality profile with low novelty seeking, low reward dependence and low self transcendence [26]. Children with alopecia areata are more withdrawn, depressed and aggressive showing depression in nearly 40-50% cases [27]. There are not many studies on personality characteristics of these patients and neither has the incidence of personality disorders in this group been studied. There is one research that documents elevated depression, psychasthenia and social introversion sub scales on assessment on the Minnesota Multiphasic Personality Inventory (MMPI) in this group [28].

NEUROBIOLOGICAL INSIGHTS INTO ALOPECIA AREATA

The influence of psychological factors in alopecia areata though well established has been debated. Recent studies have tried to explain a neurobiology for the same [29]. Acute emotional stress may precipitate alopecia areata by activation of over expressed type 2b corticotrophin releasing hormone receptors around the hair follicle leading to local inflammation [30]. Release of substance P from the nerves in response to stress has been reported and the same is noted in the hair follicles in alopecia areata. Substance P degrading enzymes have been expressed in the hair follicles in both acute and chronic alopecia areata [31]. Similar neurobiology implications have been noted in stress induced psychiatric disorders like major depression,

generalized anxiety disorder and phobias which have also been noted as comorbidity in alopecia areata [32].

QUALITY OF LIFE IN ALOPECIA AREATA

Quality of life is a broad concept and is aimed at whether a disorder limits a patient's ability to fulfil a normal role and also assesses burden and outcomes of treatments offered. It is defined as the subjective perception of the impact on health status including the disease and its treatment and on physical, psychological and social functioning and well being of patients [33]. This is a very important indicator in disorders like alopecia areata because the disorder has strong impact on social relationships, daily basis activities and psychosocial status [34]. Effectiveness of treatment in alopecia areata can also be assessed using quality of life indicators along with social and financial burden placed by the disorder on patients [35]. Studies using various quality of life instruments have demonstrated a detrimental effect on quality of life in these patients while improvement in quality of life with improvement and recovery of disease status is also known [36-37].

LIFE EVENTS AND ALOPECIA AREATA

Life events play an important role in causation of alopecia areata. Life events alone are not sufficient by themselves to reach etiological significance [38]. The most important factor that influences stress is the challenge posed to the individual by a specific stimulus. There is another important factor when looking at the role of stress in the etiology of alopecia areata. A stressful life event may mean different things to different people. People who interpret events as having negative consequences for them will be more vulnerable to emotional and immunological sequelae than others [39]. Both state anxiety and trait anxiety have been raised in patients with alopecia areata [40]. State anxiety when raised increases the clinical manifestations of alopecia areata. It is possible that trait anxiety in association with high levels of perceived stress can play a role in triggering the disease process in alopecia areata while stressful events can trigger alopecia areata exacerbations once the disease process is established [41].

FEMALE PATIENTS WITH ALOPECIA AREATA

Female patients with alopecia areata have more emotional overtones and adding to the worry may be a trivialization of the issues by inexperienced physicians [42]. At a psychological level it is very important that apart from a correct diagnosis the patient's concerns must be directly and specifically solicited and addressed. The patient's perspectives on hair loss and his expectations from treatment must be acknowledged. Patients must be psychoeducated about the normal hair cycle and hair growth while emphasizing the need for patience while aiming at good cosmetic recovery [43]. Hair is a vital component cosmetically for a woman's beauty. The length, colour and texture of hair are often ways and means of estimating the time given by a woman in the care of the self [44]. There is no doubt that in certain cultures hair is symbol of both ethnic beauty and inner strength as well as divinity. There is no question that in a disorder like alopecia areata where hair is affected one will experience a loss of self esteem and develop a dislike and repugnance for one's own looks and appearance [45]. Self esteem and social relationships are thus affected in both sexes however more for female patients. This is a clear reason for the adverse psychosocial impact caused by

alopecia areata. This issue needs to be addressed while educating patients about the disorder and counselling in this regard is a must when we aim at a better understanding and recovery from the disorder [46].

COMMUNICATION AND COMPLIANCE IN ALOPECIA AREATA

Communication skills are a must when dealing with a patient of alopecia areata as good communication is vital in the recovery process. Communication has to include listening to the patient, understanding the patient, informing about various tests and diagnostic procedures as well as therapeutic considerations and prognosis [47]. It also involves convincing the patient while giving hope and jointly rejoicing over therapeutic progress. One has to also avoid a personal dominant behaviour and stereotype prejudices [48]. Communication will also play a role in ensuring compliance. Treatment success relies on patient compliance and that in turn relies on confidence and motivation [49]. Some of the major barriers to treatment compliance are denial of the problem, fear of side effects, treatment costs, poor previous experience and lack of trust. One must prescribe treatment options that will be beneficial along with a discussion on side effects as well as advice on coping and minimising them [50]. A good physician patient relationship is the key to achieving success in the management of a disorder like alopecia areata [51].

ROLE OF PSYCHOLOGICAL INTERVENTIONS IN ALOPECIA AREATA

There is a need for dermatologists to work in liaison with mental health professionals when it comes to the successful management of alopecia areata a disorder which is dermatological in origin and yet has intense psychological ramifications. Data available with psychotherapy intervention in alopecia areata is minimal. There is a favorable result with insight oriented psychotherapy [52], family therapy [53] and hypnotherapy [54]. The techniques focus on training of general coping strategies and body image improvement strategy. Emotional regulation is another area where intervention is needed along with psycho education of the family and patient [55]. Patient education and counselling along with counselling and psychoeducation of relatives in helping patients cope is another area which is important [56]. Information on the use of psychotropic drugs as well as antidepressants in this population as well as data on comparative studies or trials in this regard was unavailable. Clinical experience suggests that the decision shall be on case to case basis.

CONCLUSIONS

Thus as we can see literature on various psychological issues in alopecia areata is present though sparse. There is an urgent need to promote further research in the area of psychology and psychological interventions for the management of this disorder. Treatment related studies are absent and there is a need for better documentation of management procedures from the mental health perspective. There is a growing need for dermatologists to liaison with mental health professionals in the long term and holistic management of this complex and vexing disorder.

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