Revista Iberoamericana de las Ciencias de la Salud | RICS ISSN: 2395 - 8057

Alopecia areata y personalidad: estado de su relación a través de una revisión bibliográfica

Alopecia areata and personality: status of their relationship through a literature review

Alopecia areata e personalidade: status de seu relacionamento através de uma revisão de literatura

Juan Carlos Fernández-Rodríguez
Universidad Antonio de Nebrija. Madrid, España
jfernanr@nebrija.es
https://orcid.org/0000-0003-3312-861X

Fernando Miralles Muñoz
Universidad San Pablo CEU, España
f.miralles@ceu.es
https://orcid.org/0000-0003-3382-5343

Luis Millana Cuevas
Universidad Antonio de Nebrija. Madrid, España
lmillana@nebrija.es
https://orcid.org/0000-0002-7824-6313

Resumen

En el presente trabajo se define la alopecia areata y se ofrecen sus características y cifras epidemiológicas para intentar establecerla como un trastorno psicofisiológico; esto con el fin de analizar las posibles relaciones entre esta enfermedad y distintas variables psicológicas, para lo cual se ha realizado una revisión bibliográfica en múltiples bases documentales agrupadas en el buscador Odysseus. En concreto, se describe la relación entre la enfermedad y distintas manifestaciones psicológicas a través de un repaso a las investigaciones que han estudiado el vínculo entre alopecia areata y factores de personalidad. Como conclusión se puede indicar que las variables psicológicas guardan relación con dicho padecimiento; asimismo, y aunque el factor etiológico permanece en discusión, se acepta que las variables psicológicas pueden

mantener y agravar el curso de la enfermedad, lo que podría repercutir de forma negativa en la calidad de vida de las personas.

Palabras clave: alopecia areata, personalidad, trastornos dermatológicos, variables psicológicas.

Abstract

In the present paper, alopecia areata is defined and its epidemiological characteristics and figures are offered to try to establish it as a psychophysiological disorder; this in order to analyze the possible relationships between this disease and different psychological variables, for which a bibliographic review has been carried out in multiple documentary databases grouped in the Odysseus search engine. Specifically, the relationship between the disease and different psychological manifestations is described through a review of the researches that have studied the link between alopecia areata and personality factors. In conclusion, it can be indicated that the psychological variables are related to this condition; likewise, and although the etiological factor remains under discussion, it is accepted that psychological variables can maintain and aggravate the course of the disease, which could have a negative impact on the quality of life of people.

Keywords: alopecia areata, personality, dermatologic disease, psychological variables.

Resumo

No presente trabalho, a alopecia areata é definida e suas características e dados epidemiológicos são oferecidos para tentar estabelecê-la como um distúrbio psicofisiológico; isto para analisar as possíveis relações entre esta doença e diferentes variáveis psicológicas, para as quais foi realizada uma revisão bibliográfica em múltiplas bases de dados documentais agrupadas no mecanismo de busca Odysseus. Especificamente, a relação entre a doença e diferentes manifestações psicológicas é descrita através de uma revisão das pesquisas que estudaram a ligação entre a alopecia areata e fatores de personalidade. Em conclusão, pode-se indicar que as variáveis psicológicas estão relacionadas a essa condição; da mesma forma, e embora o fator etiológico permaneça em discussão, aceita-se que as variáveis psicológicas podem

manter e agravar o curso da doença, o que poderia ter um impacto negativo na qualidade de vida das pessoas.

Palavras-chave: alopecia areata, personalidade, distúrbios dermatológicos, variáveis psicológicas.

Fecha Recepción: Septiembre 2018 **Fecha Aceptación:** Enero 2018

Introduction

Alopecia areata is a chronic inflammatory disease characterized by hair loss suddenly and abruptly, which causes non-scarring alopecia, where the follicle is still alive although presenting a pathology (Buján, Bocián, Cervini and Pierini, 2013). Commonly, the disease manifests as hair loss in the form of plaques and can affect any body area, although in 90% of cases it occurs on the scalp (Alkhalifah, Alsantali, Wang, McElwee and Shapiro, 2010).

The etiology of this disease is varied and inaccurate (Islam, Leung, Huntley and Gershwin, 2015), but it can be indicated that its origin is mainly polygenic and environmental, although other factors may be involved, such as the autoimmune response with localization in the hair follicle. originated by the reciprocal influence of genetic factors with other infectious and psychological factors (Olguín, Martín, Rodríguez and Peralta, 2013).

The epidemiological figures of alopecia areata are between 1% and 2% of the general population (Karia, De Sousa, Shah, Sonavene and Bharati, 2015), a figure that, according to the literature, can amount to 2% and 5% (Fierro-Arias, De la Fuente-García, Cortés-Rodrigo, Baños-Segura and Ponce-Olivera, 2016). Regarding the age of patients with this disease, it can be noted that most are relatively young, since at least 66% are under 30 years old and 20% are over 40 years old (Gilhar, Etzioni and Paus, 2012).

Alopecia areata is classified into three categories: alopecia areata on plates (the most common form of presentation), consisting of partial hair loss on the scalp; total alopecia areata or total loss of hair on the scalp, and alopecia areata universal or total hair loss throughout the body (Alkhalifah et al., 2010).

Likewise, and in addition to a worse prognosis, poor response to treatment and greater extension of the disease, the following factors are associated with it: early presentation, rapid hair loss, longer duration of the disease, presence of nail disorders (of the nails)) and concomitant autoimmune diseases (Delgado, Castro y Nava, 2018).

On the other hand, Lavda and Webb (2012) recognize the relevance of psychological factors in the onset, maintenance and exacerbation of a wide variety of skin conditions, which is why psychological therapies are recommended in routine dermatological practice.

As for the medical treatment of this disorder, it can be said that it is limited, since it is usually symptomatic. In fact, there is no completely effective intervention for patients whose psychological symptoms can be associated with the disease (Hunt and McHale, 2005). Regarding psychological treatment, there are hardly any studies that have examined its efficacy. In addition, the research carried out has not been systematically specified nor have randomized studies been included, since they have focused on coping issues, and not on specific treatment strategies (Salazar, 2017). Even so, it seems clear that patients with long-term alopecia and female patients tend to seek more psychological resources for the treatment of their disorder (Hussain et al., 2017) because their repercussions are usually manifested in that area.

In fact, the aesthetic repercussions as a social factor or as a distortion of the patient's own image are really important. Perhaps the loss of hair on the face and in the head as more visible parts of the body are the ones that produce the greatest embarrassment in the patients and, therefore, a more considerable decrease in self-esteem, which usually happens mainly in women to which hair has traditionally been associated with beauty and femininity. Likewise, the emotional repercussions of the disease can be clearly greater in young people and adolescents.

Having explained the above, it can be indicated that the objectives of this work are to establish a possible relationship between alopecia areata and the personality of the patient, and to specify the psychophysiological character of this disorder, for which a bibliographic review of this topic has been carried out.

Alopecia areata and psychological factors

The relationship between psychological factors and alopecia can be traced back to the time of Hippocrates, who wrote about patients who pulled their hair because of emotional stress (França, Chacon, Ledon, Savas and Nouri, 2013). In addition to this, there are multiple studies that relate alopecia areata with psychological variables, although it is worth noting several of them have been developed with correlational methodology, while others mix the presence of alopecia with dermatological disorders, which complicates the task of issuing conclusions .

Following Serón and Calderon (2015), patients with alopecia areata suffer more depression, anxiety and social phobia. A large part of these manifest the aforementioned problems in the long term, with frequent conflicts in the daily relationship with other people; even some studies have found links between the low quality of life of these patients and depression (Salazar, 2017).

In fact, it has traditionally been indicated that stress is a primary or exacerbation variable in dermatological disorders, so there is a high consensus that environmental stress and stressful life events can precipitate the onset and relapses in this type of disorders, although the literature with controlled studies is very reduced (Miranda, 2015).

On the other hand, in the decade of the 1960s some research that describes the clear influence of physical factors on the disease emerges, reason why some authors indicate that at least a high level of stress can produce mild symptoms, and vice versa (Reinhold, 1960) .

Even so, it is worth noting that research on stress and alopecia areata is insufficient; in fact, most of those found, as with other dermatological disorders related to hair, do not perform measurements with properly validated instruments. In addition, the results are not contrasted with adequate control groups and the investigations are carried out retrospectively, which causes the memory to be distorted. Likewise, they do not correctly recognize the exact course of the disease, which is why it is risky to associate certain events with patients' alopecia. (Picardi y Abeni, 2001).

As discussed above, alopecia can generate psychological and social effects in the person who suffers. The diseases that occur with hair loss can be a great stigmatization for the patient and a significant reduction in their quality of life. For Kacar et al. (2016), the stigmatization caused by alopecia areata may be greater than that caused by mental illness, although it should be noted that these authors found no relationship between stigmatization and the sociodemographic variables of the patients. Despite the small number of participants in the samples used and the data collection system (ie the self-report), the authors conclude that stigmatization should be considered in the treatment of the disease, since it can become a factor of possible adherence to treatment.

Regarding the quality of life, it is necessary to highlight the review carried out by Rencz et al. (2016), since it includes 21 studies and a total of 2530 adult patients. Thanks to the results obtained with this work, it is shown that patients with alopecia areata experience a significant deterioration in the quality of life, especially in the area of mental health. In the investigation several instruments of measurement of the quality of life related to health were used, both generic and specific for dermatology, although no validation study has confirmed its applicability in alopecia areata.

Broadly speaking, it can be easy to define alopecia as a merely aesthetic disease, since it does not have serious or fatal physical consequences; However, the evaluation of the quality of life related to health explains the important difficulties experienced by their patients, which encourages their comprehensive care. This, in addition, offers a basis for prioritizing research on the pathogenesis and treatment of this disease.

Indeed, the quality of life related to health allows patients, researchers and the medical community to equate the psychosocial weight of the disease with physical symptoms, which could help compare emotionally serious conditions (such as alopecia areata) with a Physically serious symptomatic disease, also framing the treatment in a multiprofessional spectrum (Rodgers, 2018).

On the other hand, in terms of anxiety and depression, higher levels of these emotions have been reported in comparison with subjects free of the disease (Olguín et al., 2013). Patients with alopecia seem to experience more depressed, hysterical and anxious feelings, and show higher hypochondriacal tendencies and greater conflict with their social environment (Alfani et al., 2012). In this sense, the pathological concern for

the disease must be investigated in order to better try the quality of life in these patients, because in this way the risk of developing an anxiety disorder can be reduced (Sahin, 2017).

In summary, and based on the literature reviewed, it seems that anxiety and depression were not directly related to the etiology of alopecia, although emotional processes could be important factors in the evolution and maintenance of the disease.

Alopecia and personality

The study of personality in patients with alopecia areata is one of the major areas of research that relates physical illness and psychological factors. However, it should be noted that the study of personality in dermatology is not too extensive, although there is some literature that suggests that personality factors may have important implications in dermatological disorders (Willemsen, Roseeuw and Vanderlinden, 2008). From this perspective, the published studies have attempted to describe the personality of patients with alopecia areata.

Although it is true that there is a tendency to link the personality with alopecia areata, a characteristic profile of these patients has not yet been established. In fact, in the particular experience of each of them can be observed an interrelation between the disease and a subjectivity in each patient. The particularities of the personality can mediate between the difficulties that the disease presents and the person's coping reaction.

Methodology

The collection of bibliographic information for this work was carried out in January 2019 through the Odysseus search engine of the Nebrija University of Madrid (Spain). The search descriptors were alopecia areata, personality, psychological variables and dermatological disorders (with their respective translations in English). The following is a description of the studies found that were taken as samples from adult patients.

Results

The first study collected was that of Greenberg (1955), who using the Rorscharch as an instrument of evaluation in a sample of 55 patients, found that 63% of them were psychoneurotic, 23% traumatic neurotic and 14% were free of psychiatric diagnosis.

Suárez, Ballesteros and Simón (1980), in a sample of 23 patients with alopecia areata and using the 16 PF of Cattell, found that all the factors evaluated were within normality. In this work, the authors took into account both the evolution time of the disease and the clinical pattern, which allowed them to demonstrate that there was no relationship between these variables and the personality factors evaluated by the 16 FP.

Lyketsos, Stratigos, Tawil, Psaras and Lyketsos (1985), with the scale of personality deviations (EDP), compared three experimental groups (whose diagnoses were urticaria, psoriasis and alopecia) with a control group of patients with other diseases of the skin. These authors concluded that the patients of each of the experimental groups were less dominant, more intropunitive, more extrapunitive and more neurotic than those of the control group; they even diagnosed neurotic depression in patients with alopecia.

Puente, López-Sánchez and Piñero (1988), with projective character tests and psychodramatic explorations in a sample of 35 people with alopecia areata, detected traits of submission, passivity, escape from confrontation, feelings of inferiority and inhibition of aggression as characteristics relevant in the patients studied.

Wygledowska y Bogdanowski (1995a), in a sample of 60 patients, they evaluated the behavior pattern type A. The findings highlighted that the frequency of appearance of this pattern of behavior in patients can increase the regularity of their symptoms. In addition, they detected in patients an association between traits such as impulsivity, competence, dominance-aggression, impatience and desire to achieve goals in short periods of time. In fact, these same authors in a later study (1995b) in which they evaluated 55 patients and a control group of 50 volunteer subjects, through the Eysenck personality inventory (EPI), found a predominant neurotic personality in the group of patients (43.64%).

Ferrando, Corral, Lobo y Grasa (1996), with a sample of 60 patients with alopecia areata, used the polyvalent standardized psychiatric interview (EPEP) (semi-structured interview), to which they added five items of the Eysenck personality questionnaire (EPI) in its Spanish version in order to try to study the premorbid personality of the patients. In the results, these authors achieved higher scores in premorbid neuroticism in 80% of the sample studied. Likewise, they showed that patients had a great facility to worry about trivial matters; In addition, they were more easily emotional and more nervous than other people.

Antuña-Bernardo et al. (2000), in a sample of 202 patients with different skin diseases (including alopecia), evaluated various personality characteristics through the EPQ-A of Eysenck and Eysenck (they also evaluated anxiety, depression and quality of life) . In their investigation they found that women tend to score higher E (extraversion), although the highest scores were found in another dermatological disorder (psoriasis).

Ruiz-Doblado, Carrizosa and García-Hernández (2003), in a sample of 32 patients with patchy alopecia areata, used the IPDE-ICD10 (International Personality Disorders) questionnaire and the adjustment scale as assessment tools. of the disease (PAIS), which served to detect a greater presence of personality characteristics with avoidant tendencies. Specifically, 66% of the patients presented psychiatric comorbidity, mainly adjustment disorders, generalized anxiety and depressive episodes.

Carrizosa, Estepa-Zabala, Fernández-Abascal, García-Hernández y Ruiz-Doblado (2005), with the IPDE-CIE10 questionnaire (international examination of personality disorders), they evaluated 25 patients with alopecia areata and 25 patients from a control group. In this study, they did not achieve differences in the dimensions evaluated in both groups.

Cordan et al. (2006) worked with 43 patients (26 men and 17 women) who suffered from alopecia areata and 53 healthy subjects, balanced in age and sex. The evaluation tools used were the hospital anxiety and depression scale (HADS), the stress scale and the Toronto alexithymia scale (TAS). In their study, the authors found no statistically significant differences between the patients and the control group, specifically with respect to the total scores of stressful life events, depression and

anxiety. However, the TAS scores in the patients with alopecia areata were significantly higher than in the controls.

Krogh, Matus, León, Rapaport and Armijo (2007) studied the personality in a sample of 10 patients with alopecia areata, who were given clinical interviews, the Rorscharch test and the desiderative questionnaire (the last two are tests projectives). The results showed that in the sample there was a profile that was characterized by presenting a neurotic personality, obsessive style, difficulties in the channeling of the affects of aggressive character and persecutory anguish and loss.

Doruk, Tunca, Koc, Erdem and Uzum (2009) studied the personality profile in a sample of 30 patients with psoriasis and 26 patients with alopecia areata. The control group included 29 healthy subjects, all male. To collect the data they used the character and temperament inventory (ITP), the Toronto alexithymia scale (TAS) and the Spielberger state feature anger scale (STAXI). The results showed no significant differences between the temperament and character dimensions, alexithymia and anger management style, and the anger of the groups.

Alfani et al. (2012), with a sample of 73 patients with alopecia areata and 73 subjects as a control group, used the Minnesota multiphasic personality inventory (MMPI-2). The analysis of the profile obtained in the MMPI-2 showed that the scores in some scales (depression, anxiety, family relationships) reached higher levels in the patients with alopecia areata than in the subjects of the control group. Even patients with alopecia seemed to experience more depressed, hysterical and anxious feelings, had more hypochondriacal tendencies and psychopathic deviation, and suffered from greater conflict with their social environment.

Burcak, Bilgic, Kaya y Güler (2013) They studied the temperament profiles, as well as the character and psychopathology of patients with alopecia areata to compare the findings with healthy control groups. To do this, they used a sample of 73 patients with alopecia areata and another of 78 subjects as a control group. The evaluation tool was the temperament and character inventory (TCI). The study also inquired into the general psychopathology of patients, for which the revised version of the symptom checklist-90 (SCL-90-R) was used. The findings showed that patients with alopecia areata had a personality style with the following characteristics: low search for novelty

(complications in adapting to changes that may involve the presence of a stressor, are not open to improvement, poor tolerance to news), low dependence on reward (people with a predominance of a solitary character, cold, with difficulty in terms of social communication and difficulty in establishing relationships), in addition to a diminished self-transcendence. Likewise, significant differences were reported in terms of the TCI scores, which are maintained in comparison with the controls when manipulating the influence of anxiety and depression. Finally, the scores obtained in the TCI did not correlate with clinical parameters, such as the extension or duration of the disease.

Agahei, Saki, Daneshmand and Kardeh (2014) focused on the frequency of psychological disorders in patients with alopecia areata compared to a control group. They evaluated 40 patients with alopecia areata and a control group matched in number of subjects, age and sex. The evaluation tools were the Beck Depression Inventory (BDI) and the Eysenck Personality Questionnaire (EPQ). In the results, significant differences were detected between the groups, especially in the items of depression, anxiety and neuroticism, although no significant differences were reported in extraversion, psychosis and lying. On the other hand, there were no significant correlations between the duration of the disorder, the age of onset, the number of relapses and the intensity of the disease compared to the personality dimensions evaluated. Regarding the relationship of the location of the alopecia, when the disease affected the scalp and the face, significantly high levels of neuroticism were found.

Erfan et al. (2014) evaluated 42 patients with a first outbreak of alopecia areata and 60 subjects who comprised a control group. For the evaluation, Cloninger's temperament, character and impulsiveness (TCI) questionnaire was used. The scores obtained did not show significant differences between the two groups, although it is worth noting that only patients with a first outbreak were evaluated and patients with a psychiatric diagnosis were excluded from the sample.

Sellami *et al*. (2014) took a sample of 50 patients (52% women) with alopecia areata from a hospital setting, for which they used the following instruments: scale of anxiety and depression in hospital (HADS) and Toronto alexithymia scale (TAS). They also measured the severity of alopecia. Statistically significant differences were found between the patients and the control group in the depression and anxiety scores. In fact,

42% of patients scored positive in alexithymia, although no significant differences were detected between the group of patients and the control group in that item.

Dehghani, Dehghani, Kafaie and Reza (2017) compared and evaluated the prevalence of alexithymia in patients with psoriasis, alopecia areata, vitiligo and acne vulgaris. The study involved 120 patients and 30 subjects as a control group, using the Toronto alexithymia scale (TAS). Thanks to the analysis of the scores, significant differences were found between vitiligo and alopecia areata, but no significant difference was found between patients with acne and the control group. The summary of all the studies commented can be seen in table 1.

Tabla 1. Estudios que han relacionado alopecia areata y personalidad

Estudio	**Muestra**	**Evaluación**	**Resultados**
Greenberg (1955) con AA	55 sujetos	Rorscharch	14 % de pacientes libres de diagnóstico psiquiátrico
Suarez, Ballesteros y Simón (1980)	23 pacientes con AA	16 PF	No relación con factores de personalidad
Lyketsos, Stratigos, Tawil, Psaras y Lyketsos (1985)	26 pacientes con psoriasis 28 pacientes con urticaria 38 controles	EDP	Relación con dominación, neuroticismo y depresión
Puente, López-Sánchez y León (1988)	35 pacientes con AA	Técnicas proyectivas	Relación con sumisión, pasividad, inhibición e inferioridad.
Wygledowska y Bogdanowski (1995a)	60 pacientes con AA	Evaluación patrón tipo A. Adaptación para Polonia	Relación con variables de conducta del patrón tipo A.
Wygledowska y Bogdanowski (1995b)	55 pacientes con AA 50 sujetos control	EPI	Personalidad neurótica en el 43.64% del grupo de AA.
Ferrando, Corral, Lobo y Grasa (1996)	60 pacientes con AA	Entrevista estructurada (EPEP)	Relación con neuroticismo, ansiedad, emotividad y preocupación por asuntos trivales
Antuña-Bernardo, García-Vega, González, Secades, Errasti y Curto (2000)	202 pacientes con distintas enfermedades de la piel	EPQ-A, STAI, Escala depresión de Zung Cuestionario Skindesk (calidad de vida)	El perfil de AA no es homogéneo y diferenciado de la población normal. Mayores puntuaciones en los grupos de psoriasis y herpes.
Ruiz-Doblado, Carrizosa y García-Hernández (2003)	32 pacientes con AA	Entrevista estructurada, psiquiátrica IPDE-CIE 10 y PAIS	El 66% presenta comorbilidad

Carrizosa, Estepa-Zabala, Fernández-Abascal, García-Hernández y Ruiz-Doblado (2005)	25 pacientes con AA 25 sujetos control	IPDE-CIE 10	No se encuentran diferencias significativas
Cordan, Başterzï, Tot Acar, Üstünsoy, Ikizoğlu, Demirseren y Kanik (2006),	43 pacientes con AA 53 sujetos sanos como control	HADS TAS	Puntuaciones significativamente mayores en en el TAS en AA. Sin significación en el HADS
Krogh, Matus, Rapaport con AA y Armijo (2007)	10 pacientes	Rorscharch Cuestionario desiderativo Entrevista semi Estructurada	Relación con León, neurótica, dificultad en la canalización de afectos
Doruk, Tunca, Koc, Erdem y Uzum (2009)	30 pacientes con psoriasis 26 pacientes con AA 29 sujetos sanos	TAS ITP STAXI	No se encuentran diferencias significativas
Alfani et als. (2012)	73 pacientes con AA 73 sujetos sanos	MMPI-2	Mayores puntuaciones en AA en ansiedad, depresión y relaciones familiares
Burcak, Bilgic, Kaya y Güler (2013)	73 pacientes con AA 78 sujetos sanos	TCI SCL-90-R	Diferencias significativas en AA, mayor búsqueda de novedad, dependencia de la recompensa y autotrascendencia
Agahei, Saki, Daneshmand y Kardeh (2014)	40 pacientes con AA	BDI EPQ	Diferencias significativas en AA en cuanto a depresión, ansiedad y neuroticismo
Erfan et als. (2014) con AA	42 pacientes 60 sujetos sin antecedentes psiquiátricos o dermatológicos	TCI	No se encuentran diferencias significativas
Sellami et als. (2014)	50 pacientes con AA	HADS TAS	Diferencias significativas en TAS (42%) Sin diferencias en el HADS
Dehghani, Dehghani, Kafaie y Reza (2017)	120 pacientes con varios trastornos de piel 30 pacientes control	TAS	Diferencias significativas en AA y vitíligo. Sin diferencias significativas en AA y control

Fuente: Elaboración propia

Conclusions and discussion

Analyzing the studies of the present work, the following conclusions can be issued:

- Higher quality assessment instruments with better psychometric characteristics should be used to increase reliability and validity criteria, since projective tests of dubious validity have been detected in many cases.
- Studies generally use very few samples, which, in some cases, are composed of several dermatological disorders; In addition, the control groups are usually very small and scarcely described in terms of their inclusion and exclusion criteria. In addition, in some studies the samples are insufficiently described. In fact, the scarce random nature of the samples studied can be highlighted. It would therefore be highly advisable to work with broader and more representative samples.
- Most studies teach statistically significant scores that show a greater prevalence of psychiatric diagnosis and negative psychological variables.
- Until now, the relationship between personality factors and alopecia areata is not firmly established. In fact, it is clear that a specific direction can not be indicated in the relationship (very possibly it is bidirectional), although it could be affirmed, based on the studies analyzed, that the personality factors are relevant for the understanding of the relationship between alopecia areata and psychological variables.
- Although up to now the etiology is a factor that remains under discussion, it seems that the psychological variables may predispose a worse prognosis of the disease and of adaptation, which would negatively influence the quality of life of the patient.

In summary, patients affected with alopecia areata seem to have psychological factors associated with their disease, including certain features of anxiety, depression and even dysfunctional family relationships, which could contribute directly to the morbidity of the disease.

Regarding treatment, it seems clear that the multidisciplinary approach of the patient is an absolutely necessary issue, in which psychological assessment should be considered in order to offer comprehensive therapeutic care.

In short, because the validity of many of the studies is debatable, we must work on the instruments and procedures followed to select the samples, the evaluation tools and the applied methodology.

References

Aghaei, S., Saki, N., Daneshmand, E. and Kardeh, B. (2014). Prevalence of psychological disorders in patients with alopecia areata in comparison with normal subjects. *ISRN Dermatology*, *9*, 304-370. Doi: http://dx.doi.org/10.1155/2014/304370

Alfani, S., Antinone, V., Mozzetta, A., Pietro, C. D., Mazzanti, C., Stella, P. and Abeni, D. (2012). Psychological status of patients with alopecia areata. *Acta Dermato-Venereologica*, *92*(3), 304-306. Doi**:** https://doi.org/10.2340/00015555-1239

Antuña-Bernardo, S., García-Vega, E., González, A. M., Secades, R., Errasti, J. M. y Curto, J. R. (2000). Perfil psicológico y calidad de vida en pacientes con enfermedades dermatológicas. *Psicothema*, *12*(Supl. 2), 30-34.

Alkhalifah, A., Alsantali, A., Wang, E., McElwee, K. J. and Shapiro, J. (2010). Alopecia areata update: part I. Clinical picture, histopathology, and pathogenesis. *Journal of the American Academy of Dermatology*, *62*(2), 177-188. Doi: 10.1016/j.jaad.2009.10.032.

Burcak, A. B., Bilgic, B., Kaya, S. K. and Güler, O. (2013). Temperament-Character Profiles in Patients with Alopecia Areata. *Bulletin of Clinical Psychopharmacology*, *23*(4), 326-34. Doi: 10.5455 / bcp.20130227031949

Buján, M. M., Bocian, M., Cervini, A. B. y Pierini, A. M. (2013). Alopecia areata. *Archivos Argentinos de Pediatría*, *111*(5), 455-456.

Carrizosa, A., Estepa-Zabala, B., Fernández-Abascal, B., García-Hernández, M. J. and Ruiz-Doblado, S. (2005). Alopecia areata: a specific personality? *International Journal of Dermatology, 44*(5), 437-8. Doi: 10.1111/j.1365-4632.2005.02277.x

Cordan, Y. A, Basterzi, A., Tot Acar, S., Ustunsoy, D., Ikizoglu, G., Demirseren, D. and Karnik, A. (2006). Alopecia areata and alexithymia. *Turk Psikiyatri Derg, 17*(2), 101-6.

Dehghani, F., Dehghani, F., Kafaie, P. and Reza, M. (2017). Asian pearls: Alexithymia in different dermatologic patients. *Asian Journal of Psychiatry*, (25), 42-45. Doi: https://doi.org/10.1016/j.ajp.2016.10.011

Delgado, E. G., Castro, E. y Nava, R. (2018). Alopecia areata universal. *Revista Cubana de Medicina General Integral, 33*(4).

Doruk, A., Tunca, M., Koc, E., Erdem, M. and Uzum, O. (2009). Alexytimia, Anger-Anger Management Style and Temperament-Character Profiles in Males with Alopecia Areata and Psoriasis. *Turkiye Klinikleri Journal of Medical Sciences, 29*(6), 1503-1509.

Erfan, G., Albayrak, Y., Yanik, M. E., Oksuz, O., Tasolar, K., Topcu, B. and Unsal, C. (2014). Distinct temperament and character profiles in first onset vitiligo but not in alopecia areata. *Journal of Dermatology*, *41*(8), 709-15. Doi: 10.1111 / 1346-8138.12553.

Ferrando, F., Corral, C., Lobo, A. y Grasa, M. (1996). Estudio de los fenómenos de estrés y su relación con variables psicopatológicas, clínicas e inmunológicas en pacientes con alopecia areata. *Actas Dermosifiliográficas*, *79*(2), 87, 597-609.

Fierro-Arias, L., De la Fuente-García, D., Cortés-Rodrigo, M. D., Baños-Segura, C. y Ponce-Olivera, R. M. (2016). Alteraciones oculares en pacientes con diagnóstico de alopecia areata. *Dermatología Revista Mexicana*, *60*(3), 203-209.

França, F., Chacon, A., Ledon, J., Savas J. and Nouri, K. (2013). Psychodermatology: a trip through history. *Anais Brasileiros de Dermatologia*, *88*(5), 842-843. Doi: 10.1590/abd1806-4841.20132059

Gilhar, A., Etzioni, A. y Paus, R. (2012). Alopecia areata. *New England Journal of Medicine, 366*(16), 1515-1525. Doi: 10.1056/NEJMra1103442

Greenberg, S. I. (1955). Alopecia areata. A Psychiatric survey. *Archives of Dermatology*, *72*(5), 454-457.

Hunt, N. and McHale, S. (2005). The psychological impact of alopecia. *British Medical Journal*, *331*(7522), 951-953. Doi: 10.1136/bmj.331.7522.951

Hussain, S. T., Mostaghimi, A., Barr, P. J., Brown, J. R., Joyce, C. and Huang K. P. (2017). Utilization of Mental Health Resources and Complementary and Alternative Therapies for Alopecia Areata: A U.S. Survey. *International Journal of Trichology*, *9*(4), 160-164. Doi: 10.4103/ijt.ijt_53_17

Islam, N., Leung, P. S., Huntley, A. C. and Gershwin, M. E. (2015). The autoimmune basis of alopecia areata: a comprehensive review. *Autoimmunity Reviews*, *14*(2), 81-89. Doi: https://doi.org/10.1016/j.autrev.2014.10.014

Kacar, S. D., Soyucok, E., Bagcioglu, E., Ozuguz, P., Coskun, K. S., Asık, A. H. and Mayda, H. (2016). The perceived stigma in patients with Alopecia and mental disorder: a comparative study. *International Journal of Trichology*, *8*(3), 135-140. Doi: 10.4103/0974-7753.189005

Karia, S. B., De Sousa, A., Shah, N, Sonavance, S. and Bharati, A. (2015). Psychiatric morbidity and quality of life in skin diseases: A comparasion of alopecia areata and psoriasis. *Industrial Psychiatry Journal*, *24*(2), 125-128. Doi: 10.4103/0972-6748.181724

Krogh, E., Matus, V., León, A., Rapaport, E. y Armijo, I. (2007). Alopecia areata y personalidad. *Gaceta Psiquiátrica Universitaria*, *3*(3), 353-359.

Lavda, A. C. and Webb, T. L. (2012). A meta-analysis of the effectiness of psychological interventions for adults with skin condition. *British Journal of Dermatology*, (167), 970-979.

Lyketsos, G. C., Stratigos, J., Tawil, G., Psaras, M. and Lyketsos, C. G. (1985). Hostile personality characteristics, dysthymic states and neurotic symptoms in urticaria, psoriasis and alopecia. *Psychotherapy and Psychosomatics*, *44*(3), 122-131.

Miranda, A. (2015). *Estudio dermatológico y psiquiátrico en pacientes con alopecia areata* (tesis doctoral). España: Universidad de Valladolid.

Olguín, M. G., Martín, A., Rodríguez, M. y Peralta, M. L. (2013). Factores psicológicos asociados con la alopecia areata. *Dermatología Revista Mexicana*, *57*(3), 171-177.

Picardi, A. and Aberni, D. (2001). Stressful life events and skin diseases: disentangling evidence from myth. *Psychoterapy and Psychosomatics*, *70*(3), 118-136.

Puente, M., López-Sánchez, J. y Piñero, J. (1988). Exploración psicológica en alopecia areata. A propósito de 35 observaciones. *Actas Dermosifiliográficas*, *79*(2), 165-71.

Reinhold, M. (1960). Relationship of stres to the development of symptoms in alopecia areata in chronic urticaria. *British Medical Journal*, *19*(1), 48-52.

Rencz, F., Gulácsi, L., Péntek, M., Wikonkál, N., Baji, P. and Brodszky, V. (2016). Alopecia areata and health related quality of life: a systematic review and meta analysis. *British Journal of Dermatology*, *175*(3), 561-571. Doi: 10.1111/bjd.14497

Rodgers, A. R. (2018). Why Finding a Treatment for Alopecia Areata Is Important: A Multifaceted Perspective. *Journal of Investigative Dermatology*, *19*(1), 59-53. Doi: https://doi.org/10.1016/j.jisp.2017.10.008

Ruiz-Doblado, S., Carrizosa, A. and García-Hernández, M. J. (2003). Alopecia areata: psychiatric comorbidity and adjustment to illness. *International Journal of Dermatology*, *42*(6), 434-7.

Sahin, B. (2017). Increased Pathological worry levels in patients with alopecia areata. *Journal of Medical and Analytical Medicine*, *8*(1), 10-13. Doi: 10.4328/JCAM.4257

Salazar, M. (2017). *Calidad de vida en las alopecias e influencia de la relación médico-paciente*. Alcoy: Editorial Área de Innovación y Desarrollo.

Sellami, R., Masmoudi, J., Ouali, U., Mnif, L., Amouri, M., Turki, H. and Jaoua, A. (2014). The relationship betwee alopecia areata and alexithymia, anxiety and depression: A case-control study. *Indian Journal of Dermatology*, *59*(4), 421. Doi: 10.4103/0019-5154.135525.

Serón, T. y Calderón, P. (2015). Actualización en psicodermatología. *Revista del Hospital Clínico de la Universidad de Chile*, *26*(1), 42-50.

Suárez, E., Ballesteros S. y Simón, A. (1980). Estudio de 16 factores de personalidad en un grupo de enfermos de alopecia areata. *Gaceta Dermatológica*, *1*(1), 29-36.

Willemsen, R., Roseeuw, D. and Vanderlinden, J. (2008). Alexithymia and dermatology: the state of the art. *International Journal of Dermatology*, *47*(9), 903-10. Doi: 10.1111 / j.1365-4632.2008.03726.x.

Wygledowska, K. M. and Bogdanowski T. (1995a). Examination of the significance of psychological factors in the etiology of alopecia areata. I. Examining Type A behavior. *Przegląd Lekarski*, *52*(6), 311-314.

Wygledowska, K. M, and Bogdanowski T. (1995b). Testing the significance of psychic factors in the etiology of alopecia areata. II. Examination of personality by means of Eysenck's Personality. *Przegląd Lekarski*, *52*(11), 562-564.

Rol de Contribución	Autor (es)
Conceptualización	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Metodología	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Software	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: apoya Luis Millana Cuevas: apoya
Validación	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Análisis Formal	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Investigación	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Recursos	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: apoya Luis Millana Cuevas: apoya
Curación de datos	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Escritura - Preparación del borrador original	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: apoya Luis Millana Cuevas: apoya
Escritura - Revisión y edición	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Visualización	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Supervisión	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Administración de Proyectos	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual
Adquisición de fondos	Juan Carlos Fernández-Rodríguez: principal Fernando Miralles Muñoz: igual Luis Millana Cuevas: igual