

A New Model for Understanding the Psychosomatic Phenomena in Hair Loss Patients

Ademir Carvalho Leite Jr*

Department of Dermatology and Hair Research-Trichology, Pontificia Universidade Católica, São Paulo, Brazil

ABSTRACT

Certain types of alopecias appear to have psychoemotional stresses as triggers. Studies have shown that peptides and hormones formed as a result of psychoemotional stresses are capable of triggering a cascade of events that can lead to hair loss. This phenomenon, whose basis is psychosomatic, explains the intense relationship between emotions and feelings of lived experiences and the emergence of a clinical problem. On the other hand, it does not explain, for example, the reason why stressful events trigger manifestations in the integumentary tissue, especially in the hair follicles, causing alopecias.

The analytical psychology of the Swiss psychiatrist Carl Gustav Jung through the theory of complexes and of the amplified reading of symbols and archetypes can contribute to an understanding of the reasons why hair follicles are targeted by peptides and stress hormones. As well as, it can elucidate why the aggravation of certain hair loss happens due to specific stressful psychoemotional events.

Through the interface between psychology, biology and medicine, a new model that explains the role of stressful psychoemotional events for the appearance or worsening of hair loss is suggested in this study, facilitating the understanding of psychosomatic phenomena in the formation of alopecias.

Keywords: Psychosomatic; Hair; Psychology

INTRODUCTION AND MODEL PRESENTATION

Understanding the emotional events of patients' biographies as possible triggers, especially those that lead to distress, is something that is being done more and more frequently, either from the perspective of psychoanalysis or from the perspective of analytical psychology.

A landmark study for the development of this model of mechanism of onset of alopecias was performed by Prado and Neme in 2008, when they studied women with alopecia areata, using as methodology a semi-structured interview script that allowed the conclusion that negative relationships with parents in childhood, with elements of frustration and affective emptiness, as well as affective distancing, little fulfillment of desires and goals, as well as loss of self-esteem and self-image were present in the sample.

Another study that collaborated with the emergence of the master idea of this project was published in 2012 by Taheri et al. The researchers presented data showing that traumatic events such as loss of relatives or parental rejection were present in the biography of patients with alopecia areata.

Willemsen et al., showed that the history of stressful events in childhood and throughout the life of patients with alopecia areata was more significant than that found in a control group [1]. Diaz-Atienza and Gurpegui, studying a sample of 31 adolescents, concluded that life-stressing factors were present in the biography of the volunteers of their research and that those young people who received less family attention appeared to be more affected by the problem.

Dehghani et al., report a greater predisposition of alexithymic patients, those who have difficulty dealing with and describing emotions, in developing cases of alopecia areata than control groups [2].

Correspondence to: Ademir Carvalho Leite Jr, Department of Dermatology and Hair Research-Trichology, Pontificia Universidade Católica, São Paulo, Brazil, E-mail: ademirjr@ademirjr.com.br

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By virtue of this, and assuming that there is something very complex in the mechanisms of disease formation, including alopecias, we have developed a model of disease formation that includes concepts of analytical psychology in a context that also involves molecular biology and clinical signs and symptoms.

LITERATURE REVIEW

This context involves the theory of complexes, developed by Carl Gustav Jung in 1902. Complexes can be explained as associative mechanisms to which major mental disorders should be attributed.

These mechanisms are experienced events that will form, throughout the life, nuclei of affective energy (the complexes) with negative or positive charge according to the pattern of emotions that the individual experiences. Traumatic and conflictive (stressful) events that have similarities in their causes and emotions tend to create negative complexes. Positive emotions that come from love, affection, pleasure and belonging will favor the emergence of complexes with positive characteristics.

Negative complexes have an important role for the understanding of the model proposed here. Most of the time new events of the triggers and emotions that formed the complexes will activate a psychic and a biologic response once they will charge the complexes with more energy. This event is called by the analytical psychology theory the activation of the complex.

Taking into consideration that stressful events such as those mentioned above promote a response of the limbic system every time we live intense emotions, the activation of a complex is due to new events that are similar to the traumas and conflicts that formed this complex, a large discharge of neuropeptides and a hormonal response occur, promoting changes in body physiology and touching certain tissues, organs or body systems and thereby triggering clinical signs and symptoms.

Still from the perspective of analytical psychology, the manifestations of hair pathologies as a result of stresses could develop because the traumatic and conflicting events that activate the complexes may be associated with symbolic hair-related representations throughout human history. This concept is difficult to understand if the definition of a symbol, according to analytical psychology, is not clarified. A symbol is the meaning assigned to a daily object.

A crown, for example, may be associated with various symbolic meanings such as power, nobility, and closeness to the divine. The word symbol comes from the Greek and derives from "symbolon" which means a sign for recognition. Starting from this principle, the hair would be the daily object and the meaning given to the hair would be the symbol that it represents.

In the history of humanity the hair was associated to several symbolic meanings, such as identity, fertility, power, strength, freedom, dignity and control.

In the author's master's dissertation titled *Suffering in Women with Frontal Fibrosing Alopecia*, the volunteers of the research were asked about what the hair represented to them. Eleven of the 12 volunteers answered that hair represents identity and six of the twelve said it also represents femininity.

Jung, Papez, Rossi, Pert, McGillis, Ramos, Peters, Hadshiew, Novak, among other researchers, collaborated to the structuring of this model of disease formation that associates alopecias with pathophysiological mechanisms, the complex theory and the symbolic aspect of target organs [3-7].

In this model (Figure 1), the conflicting and traumatic events of life activate the complexes, and can trigger two patterns of responses. When the individual is unable to give meaning to the stressful event, the response occurs on the neuropsychic level, in the form of neuroses and other psychiatric conditions.

When the individual is able to signify/understand his/her suffering the effects of complex activation tend to manifest in the physical body. The limbic system is responsible for bridging the emotions and the body, promoting a neuroendocrine physical response with repercussions also on the immune system. This response eventually triggers a reaction in certain target organs that could culminate in the emergence of diseases.

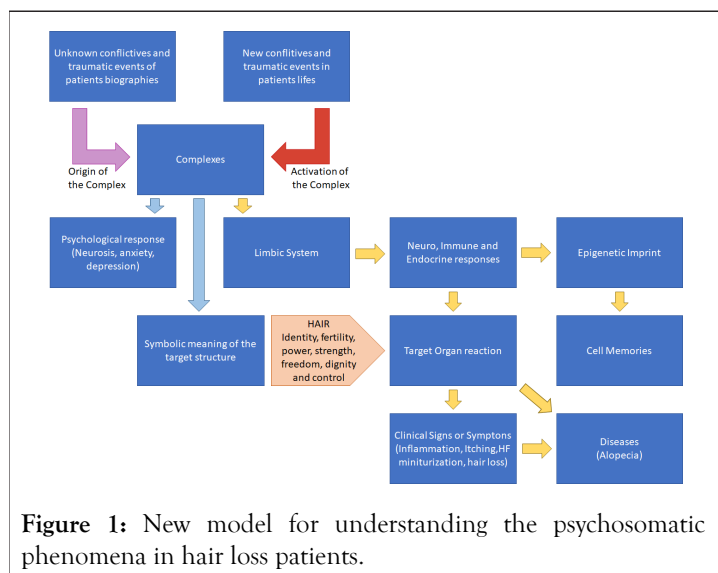
When complex activating events infer in psychic interpretations involving certain symbolic elements associated with certain bodily structures, the biological response of the complex activation tends to reach specific tissues or organs. What can be seen in the previously mentioned literature is that there is coherence between certain meanings attributed to hair with the impact pattern that certain stressful events cause in individuals who develop alopecia [8-12].

This was perceived by the author in her master's dissertation after analyzing the life biography of the volunteers studied and realizing that most of the traumas and conflicts cited by them in interviews for information gathering were related to the loss of identity and femininity caused by these stressful events.

The neuroendocrine response to emotional stress triggers that activate the complex could also act promoting an epigenetic imprint that act as a memory for the target cell/organ.

In this case, the activation of the complex caused by certain negative emotion that carries the symbolic meaning associated with a specific organ, will find in this organ an "agent of attraction" for the disease to manifest itself and to be active, acting as a modulator for the worsening of the disease.

The model presented below aims to explain this phenomenon in a simplified way, including certain elements associated with the symbolic meaning of hair, for a better understanding of the psychosomatic phenomenon associated with alopecias from the perspective of analytical psychology.



DISCUSSION

First, there is the patient's exposure to traumatic and conflictive (stressful) events that will form the complex. Once the complex is established, new exposures to stressors similar to those that formed the complex may activate it. The unconscious will try to give meaning to the stressful event. If it does not, the direction of the response to stress will favor the appearance of neuropsychiatric problems [13-15]. If the unconscious manages to assign meaning to the stressful event (to identify a symbolic meaning in the stressing agent), the biological direction of the stress response will follow the neuroimunoendocrine pathway. Stressful events that relate to what the patient understands as symbolic meaning of his hair will have the hair follicles targeted and the result may be the appearance of some alopecia. The symbolic meaning acts as an agent for directing the neuroimunoendocrine response to the hair follicle and, from the moment this first relation is established, the follicular structure acts as an agent of attraction for the response to stress whenever it has as symbolic meaning what it which the hair represents.

CONCLUSION

The Complex Theory coming from the Analytical Psychology Theory can be used to postulate a new model for understanding

the psychosomatic phenomena in hair loss patients. This Model was presented here in a simplified way and with the purpose to join the already known etiopathogeny and physiopathogeny of the hair loss problems with a psychologic point of view that can add more understanding for the emerge and evolution of patients' hair loss problems.

REFERENCES

1. Willemsen R, Vanderlinden J, Roseeuw D, Haentjens P. Increased history of childhood and lifetime traumatic events among adults with alopecia areata. 2009; 60:388-393.
2. Dehghani F, Kafaieb P, Taghizadeh MR. Alexithymia in different dermatologic patients. *Asian J Psychiatr*. 2017; 25:42-45.
3. Jung CG. *Fundamentos de psicologia analítica*. Petrópolis Vozes. 1983.
4. Ramos DG. *A psique do corpo: A dimensão simbólica da doença*. São Paulo: Summus. 2006.
5. Peters EMJ. Probing the effects of stress mediators on the human hair follicle: Substance p holds central position. *Am J Pathol*. 2007; 171(6): 1872-1886.
6. Peters EMJ, Arck PC, Paus R. Hair growth inhibition by psychoemotional stress: A mouse model for neural mechanisms in hair growth control. *Exp Dermatol*. 2006; 15(1):1-13.
7. Hadshiew IM. Burden of hair loss: Stress and the underestimated psychosocial impact of telogen effluvium and androgenetic alopecia. *J Invest Dermatol*. 2004; 123(3):455-457.
8. Prado RBR, Neme CMB. Emotive family-related experiences in women with alopecia areata. *Estudos em psicologia*. 2008; 25(4): 487-497.
9. Taheri R, Behnam B, Tousi JA, Azizzade M, Sheikhvatan MRM. Triggering role of stressful life events in patients with alopecia areata. *Acta Dermatovenereol Croat*. 2012; 20(4):246-250.
10. Diaz-Atienza F, Gurpegui M. Environmental stress but not subjective distress in children or adolescents. *J Psychosom Res*. 2011; 71:102-107.
11. Jung CG. *Estudos experimentais*. Petrópolis Vozes. 2013.
12. Ito N. Human hair follicles display a functional equivalent of the hypothalamic-pituitary-adrenal axis and synthesize cortisol. *Faseb J*. 2005; 19(10):1332-1334.
13. Paus R, Arck P. Neuroendocrine perspectives in alopecia areata: Does stress play a role? *J Invest Dermatol*. 2009; 129(6): 1324-1326.
14. Ramos DG. Aspectos simbólicos e psicossomáticos associados aos cabelos.
15. Ramos DG. Contemporary psychosomatics and non-verbal techniques. *Psychotherapist*. 2014;57: 20-23.