Successful Treatment of Multiplex Alopecia Areata Using Transactional Analysis: A Case Report

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Key Words

Alopecia areata · Transactional analysis · Psychosomatic dermatology

Abstract

The patient was a 13-year-old female. Six years previously, she developed alopecia areata when her parents divorced. One year after that, the bald area drastically expanded when her mother remarried. She was treated at her local hospital; however, no improvement was observed. She then visited our hospital for examination. A bald patch was covering >80% of her head. Self Grow-Up Egogram indicated the basic interpersonal relationship stance of 'I am not OK, You are OK'. We therefore implemented a transactional analysis approach to increase the patient's score on the Free Child subscale. New hair growth was observed after 6 months and the bald patch disappeared after 2 years. Our results suggest that this method could also be easily applied in a clinical setting by dermatologists.

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Introduction

Alopecia areata (AA) is a chronic inflammatory disease that develops in hair follicles and rarely in the nail plate [1]. Studies suggesting a relationship between AA and psychological stress have been frequently reported; these studies included both animal experiments and clinical research [2–4]. The autoimmune theory that AA is caused by T cells identifying hair follicles as autoantigens is considered highly plausible [5, 6]. However, to date, no study has clinically proven this relationship.

We treated the present pediatric case of AA that developed as a result of the divorce of the patient's parents and the remarriage of her mother. We describe the transactional

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analysis approach to AA, which is a type of psychotherapy and appears to have completely cured AA in this patient.

Case Presentation

The patient was a 13-year-old girl with a history of nocturnal enuresis. Her parents divorced 6 years previously. Since then, circular bald patches appeared on her head; these patches exhibited repeated new growth and hair loss. She received treatment for this condition at her local hospital. Her mother remarried 1 year later. Since then, her hair loss became acutely exacerbated; therefore, she was examined at her local hospital once again. She underwent treatment with externally and internally administered corticosteroids in addition to liquid nitrogen therapy. This treatment did not completely cure her condition, and she was thus examined at our hospital. Bald patches of different sizes had merged to form one large reticular bald patch. The area of hair loss exceeded 80% of the patient's head (fig. 1). Her eyebrows and eyelashes were intact. Peripheral blood and biochemical tests revealed no aberrations, and autoantibodies and thyroid hormones were within the reference ranges. The results of psychological testing were as follows: Self-Rating Depression Scale 47 points, State-Trait Anxiety Inventory, state anxiety 48 points (high), and State-Trait Anxiety Inventory, trait anxiety 63 points (extremely high). Among the results of the Self Grow-Up Egogram (SGE), the score on the Nurturing Parent (NP) subscale was the highest and that on the Free Child (FC) subscale was the lowest (fig. 2). These data suggest the basic interpersonal relationship stance of 'I am not OK, You are OK'. Unconditional positive affirmations, such as 'you are important to us even if you lose your hair', were repeatedly provided. In addition, we attempted to increase the FC ego state on SGE. In particular, when the patient underwent outpatient examinations, she was advised to speak about at least one interesting episode that had occurred in her daily life. Six months later, new hair growth was evident when she gained the ability to proactively talk about herself. Two years later, the bald patch had completely disappeared. There has been no recurrence of any bald patches during 5 years since her initial examination (fig. 3). While speaking about her feelings during her illness, she said, 'When I was experiencing repeated hair loss, I couldn't forgive myself for losing my hair. Thinking about it now, I feel that I was blaming myself excessively.'

Discussion

The severity of AA on initial examination is considered a strong long-term prognostic factor. The recovery rate of patients with an area of hair loss covering ≥50% of their head is 8% [7]. Cases of intractable AA, such as ours, are treated with systemic administration of steroids and regional immunotherapy, but treatment is often unsuccessful [1]. One report shows that in a mouse model of AA caused by stress an antidepressant drug, tianeptine, is effective [8]. Our patient experienced negative life events (divorce of her parents and her mother's remarriage) when AA onset and exacerbation occurred; therefore, it is likely that psychosocial factors were involved. We believed that there would be serious risks involved in prescribing antidepressants to an adolescent and therefore decided to attempt the transactional analysis approach.

Transactional analysis is a psychological theory proposed by Eric Berne [9]. According to this theory, each person is made up of three ego states; Parent, Adult, and Child. In the egogram, the parent alter ego is divided into the nurturing and critical elements, and the

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child alter ego is divided into the adapted and free elements, thus forming the five functional ego states: Critical Parent (CP), NP, Adult (A), FC and Adapted Child (AC) [10]. SGE was developed by the Japanese researcher (T. Katsura) as a standardized method for assessing personality [11]. SGE consists of 50 statements that can be categorized into the five functional ego states. Respondents indicate the degree of their agreements with each statement using a three-point scale: agree, disagree and neither agree nor disagree, the scores for which are 2, 0 and 1, respectively [10]. SGE allows for psychological counseling using feedback from egogram patterns [12]. We were able to help the patient to change her way of thinking from 'I am not OK, You are OK' to 'I am OK, You are OK' by raising the FC state. This change helped her to accept herself with her hair loss, and this acceptance appears to have reduced the stress.

Transactional analysis is an easy-to-understand practical psychosomatic treatment. We believe that this method could also be easily used by dermatologists and may uncover a common language between the caregiver and the patient.

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Fig. 1. Clinical feature on initial examination. Bald patches of varying sizes had merged to become one large reticular bald patch. The area of hair loss exceeded 80% of the patient's head.
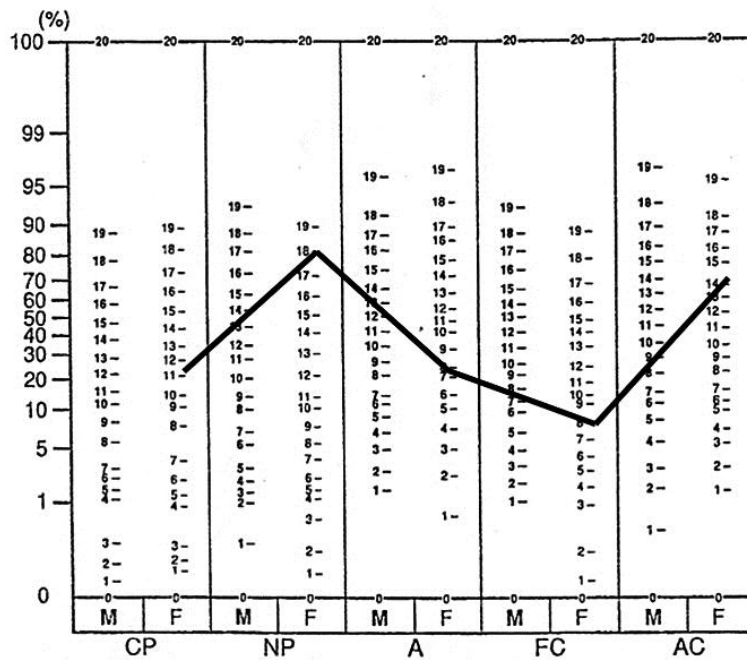

Fig. 2. Results of SGE. The patient had the mindset 'I am not OK, You are OK' regarding interpersonal relationships. In this case, the NP subscale had the highest score and the FC subscale the lowest. CP = Critical Parent; NP = Nurturing Parent; A = Adult; FC = Free Child; AC = Adapted Child.

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Fig. 3. Clinical feature 5 years after our initial examination. No recurrence of bald patches was observed.