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Integrative Immunological Approach in A Child with Alopecia Areata Universalis and Ebv Reactivation: A Case Report

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Abstract

Alopecia universalis is the most severe form of alopecia areata and is often associated with autoimmune mechanisms, chronic infections, and immune dysregulation. This case report presents a 7-year-old boy who progressed from alopecia areata to alopecia universalis within 15 days. Initial treatment with corticosteroids and biotin worsened his condition. Upon request, an integrative evaluation was performed, including lymphocyte typing and herpesvirus serologies. Findings indicated EBV reactivation and immune system hyporeactivity. Treatment with an anti-inflammatory diet, micro-immunotherapy, and micronutrition resulted in full remission of symptoms, including regrowth of facial and eyelash hair. This case emphasizes the importance of integrative immunological approaches in pediatric alopecia, especially when conventional treatments are insufficient or lead to adverse effects.

Keywords: Alopecia Areata Universalis, Epstein-Barr Virus (EBV) Reactivation, Pediatric Autoimmune Disease, Micro-Immunotherapy, Integrative Medicine, Anti-Inflammatory Diet.

Introduction

Background and Objective

Alopecia universalis is the extreme form of alopecia areata [1]. Alopecia areata is considered an autoimmune disease and has been linked to atopy, stress, nutrient deficiencies, or chronic viral infections [2,3].

This case aims to emphasize the importance of a comprehensive evaluation in the diagnostic process of pediatric alopecia universalis, including medical history, evaluation of immune status, and detection of latent infections such as Epstein-Barr virus (EBV) [4].

Method

We report on a 7-year-old boy who presented with alopecia areata, having progressed to alopecia universalis in 15 days. Initial treatments with oral corticosteroids and biotin led to worsening symptoms, including skin lesions and digestive system disorders [5]. After refusing treatment with JAK inhibitors and due to the child's exhaustion, the parents requested an integrative evaluation.

The case is studied using lymphocyte typing and herpesvirus serologies. The boy is treated with an anti-inflammatory diet, micro-immunotherapy, and micronutrition.

Results

The clinical history reveals episodes of tonsillitis and respiratory infections, including influenza. Six months before the onset of alopecia, he was infected with COVID-19. The alopecia was ac-

companied by chronic asthenia, growth and weight delay, sleep and digestive tract disorders, and skin and nail lesions.

Initial lymphocyte typing shows the characteristics of an autoimmune process with a favorable prognosis: a hyporeactive immune system with limited cytotoxic capacity. Serology shows evidences of EBV reactivation. The patient was treated with an anti-inflammatory diet, micronutrients, and micro-immunotherapy aimed at reducing inflammation, recovering the immune system, and controlling EBV reactivation. After the treatment was instituted, all the mentioned symptoms disappeared, in addition to the boy regrowing and regaining hair on his face and eyelashes.

Conclusion

The integrative medical approach carried out with this patient has allowed us to identify disorders at the immunological level and correctly assess the reactivation of the EBV, which was probably the main triggering factor of the alopecia universalis that the boy presented. Conventional treatment with systemic corticosteroids often causes side effects in pediatric patients. An integrated immunological approach focusing on managing inflammation and chronic viral infection like EBV has significant potential for clinical benefit.

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