

Preliminary Results of Vitamin D₃ Application Combined With Anisodamine In the Treatment of Alopecia Areata in Children

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Abstract

Alopecia areata is a form of inflammatory hair loss that has been known for a long time, but its cause is largely unexplored. It is characterized by the patient's hair falling out in a circular pattern, which is why this disease is also called circular hair loss. This occurs in 80% of cases in the head area but can also affect the beard in men and in exceptional cases the entire body hair.

Keywords: Vitamin D₃; Alopecia areata; Children; Anisodamine.

Introduction

Alopecia areata is a form of inflammatory hair loss that has been known for a long time, but its cause is largely unexplored. It is characterized by patient's hair falling out in a circular pattern, which is why this disease is also called circular hair loss. This occurs in 80% of cases in head area but can also affect the beard in men and in exceptional cases the entire body hair. Alopecia Areata in many forms is only one of many autoimmune diseases. It exists worldwide without

distinction of age, sex, skin color and nationality. Our organism is very individual and so is the reaction of our immune system to attacks on it. There is no specific alopecia marker in the blood that can be detected. The disease is an interaction of many factors and therefore requires a very personal individual treatment and approach to it. Alopecia is a chronic disease. Usually there is a genetic predisposition of which we often do not know

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anything because we do not know anyone in the family who also had this type of hair loss. An event of various kinds then triggers the hair loss. Alopecia also knows spontaneous growth. We present a case of an 8-years-old child successfully treated with a combination of vitamin D₃ and anisodamine topically.

Case Report

An 8-year-old male patient showed spotted alopecia with no obvious cause and developed multifocal alopecia areata within 2 months. The child did not have any symptoms during the disease.

Physical examination showed that there were multiple patchy hair defects on the head and occiput, a very small amount of spurious hair was seen in the alopecia area, and the skin in the patch was red and swollen visually, without obvious atrophy (Figure.1). Laboratory tests showed a slight decrease in zinc, iron, and calcium, and 25-

hydroxyvitamin D₃ was significantly lower than normal.

Local application of corticosteroids in the early stage of the course of the child and the treatment of dot-matrix stabs are not controlled. The treatment plan was changed to: Vitamin D₃ capsules: topical (5 capsules each time, apply to the hair loss area of the head, and massage by hand for 3-5min) + Anisodamine: Oral (0.1mg/kg, tid); Compound zinc and iron Calcium oral solution (10ml/time, tid); lysinohydrin vitamin B₁₂ oral solution (10ml/time, bid).

After 2 months of treatment, the follow-up reexamination showed that there were more new hairs in the alopecia area (Figure 2), and no obvious abnormality was found in the laboratory examination. After the treatment of this program for half a year, the alopecia area was completely normal. After a follow-up visit for 1 year, the symptoms of alopecia areata did not repeat (Figure 3).



Figure 1: Initial degree of disease.



Figure 2: Two months after treatment.



Figure 3: The cure of the patient 1 year after application of combined Vitamin D₃ and Anisodamine.

Discussion

The median age of onset of alopecia areata is about 10 years old, and the male to female ratio is 1.4:1 [1]. Some studies believe that the occurrence of alopecia areata in children is related to the lack of trace elements, especially the lack of calcium and zinc [2-4]. The first-line treatment for alopecia areata is the application of topical corticosteroids [5]. In this case, the condition of the first-line

treatment of the child is not clear, but the oral anisodamine and the application of vitamin D₃ in the skin lesions, supplemented by trace elements Be controlled. As the treatment plan for this case of alopecia areata in children is individualized, it is necessary to continuously practice, sample, and follow up RCT in clinical application so that it can become a reliable guide for clinical treatment after systematic evaluation.

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