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Alopecia areata incognito: A rare cause of hair loss in children

Alopesi areata inkognito: Çocuklarda saç kaybının nadir bir nedeni

Ahmet Kağan Özdemir, Yıldız Hayran*, Güneş Gür Aksoy**

Sincan Training and Research Hospital, Clinic of Dermatology, Ankara, Türkiye
***Ankara Bilkent City Hospital, Clinic of Dermatology, Ankara, Türkiye**
****Private Practice, Ankara, Türkiye**

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To Editor,

Alopecia areata incognito (AAI) is a variant of alopecia areata (AA) characterized by acute diffuse shedding of hair over the entire scalp without AA's characteristic round bald patches. It is clinically associated with widespread and severe hair loss that develops within weeks. Herein, we present a child with AAI diagnosed with trichoscopy who showed an excellent response to intramuscular triamcinolone acetonide (TA) therapy.

A 14-year-old girl was referred to us for diffuse hair shedding, which started three weeks ago. Dermatologic examination revealed thinning of the hair affecting the entire scalp, a decrease in hair density, and nuchal nevus flammeus (Figure 1a). The pull test was positive. In trichoscopic examination, numerous yellow dots, black dots, short vellus hairs, terminal hairs with thin regrowing tips, and pigtail hairs were observed in all areas of the scalp (Figure 2). A diagnosis of AAI was rendered due to trichoscopic findings. Serum ferritin (4 mcg/L) and total vitamin D (29 nmol/L) levels were low in the laboratory examination. She had been treated for iron and vitamin D deficiency previously on several occasions but had never experienced hair loss. Her physical examination and thyroid stimulating hormone, thyroxine, and triiodothyronine levels were normal. Thyroid autoantibodies were also negative. Vitamin B12, folic acid, and sex hormones were normal. The patient weighed 45 kilograms and was given intramuscular TA 40 mg monthly for two months. She also started oral iron and vitamin D therapy. Complete hair regrowth and increased hair density were observed one month after the last systemic corticosteroid injection (Figure 1b). The pull test was negative at that time. After 2 years, her hair density was completely preserved without further treatment.

AAI has been commonly seen in females between 20-40 years old ever since its first description and has been rarely reported in pediatric patients[1,2]. Even though the presentation of the disease is different from classical AA, they show similar histopathological and trichoscopic features. In AAI, the inflammatory attack has been hypothesized to occur when most of the follicles are in the telogen stage, causing diffuse hair loss instead of in patches[1,3]. In trichoscopic examination of patients with AA, the most common findings are yellow

Address for Correspondence/Yazışma Adresi: Ahmet Kağan Özdemir MD, Sincan Training and Research Hospital, Clinic of Dermatology, Ankara, Türkiye
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ORCID: orcid.org/0000-0002-0930-7215

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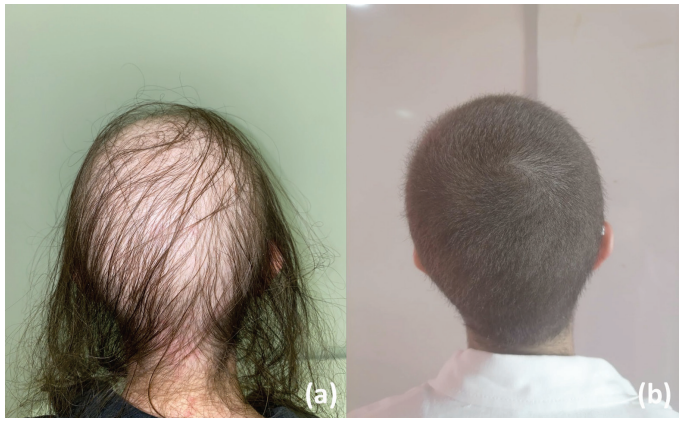

Figure 1. (a) The patient presented at baseline with diffuse hair thinning and shedding affecting the entire scalp and a nuchal nevus flammeus. **(b)** The patient showed marked improvement three months after the first treatment with monthly injections of triamcinolone acetonide twice, along with daily oral iron and vitamin D replacement

spots, short vellus hairs, black dots, broken hairs, exclamation mark hairs, pigtail hair, and upright regrowing hair. As in AA, diffuse yellow dots, regrowing hair, exclamation mark hairs, cadaverized hair, and dystrophic hair are the most common findings in the trichoscopic examination of AAI patients[3,4] but alopecia areata incognita (AAI. Alessandrini et al.[4] demonstrated that the dominant pattern of trichoscopy in the AAI patients with the most severe hair loss was empty yellow dots, yellow dots with vellus hair, small hair in regrowth, and pigtail hair.

Acute severe diffuse hair loss, accompanied by typical trichoscopic findings, resulted in the diagnosis of AAI, which was both non-invasive and rapid in our pediatric patient. The primary differential diagnosis was trichotillomania in this patient. While diffuse hair loss is a clinical feature that can be seen in both AAI and trichotillomania in this age group, the latter condition usually presents with areas of differing lengths and various stages of regrowth in an identifiable geometric area of hair loss. Trichoscopic findings such as the absence of irregularly coiled hairs, trichoptilosis, flame hair, v-sign, follicular haemorrhages, and the detection of yellow dots were helpful during the exclusion of trichotillomania diagnosis in this case. The prognosis of AAI is very good, and it has an excellent response to intramuscular TA, just like we experienced in our patient. Systemic corticosteroids (e.g., oral, intravenous, and intramuscular) are preferred in extensive and/or rapidly progressive AA. Intramuscular corticosteroids such as TA may be most beneficial among systemic modalities, as their monthly or bimonthly regimen increases patients' compliance and treatment adherence[5]. Moreover, intramuscular corticosteroids could minimize adverse effects due to their pharmacokinetic properties, with a gradual and steady release of corticosteroids over time[5]. Most of the studies used a 40 mg dose of TA for AA patients, which is consistent with our approach to treating our patient[5]. In conclusion, this report describes an underrecognized cause of hair loss in children, which may lead to frustration. It can be diagnosed non-invasively with trichoscopy and treated successfully with intramuscular TA.

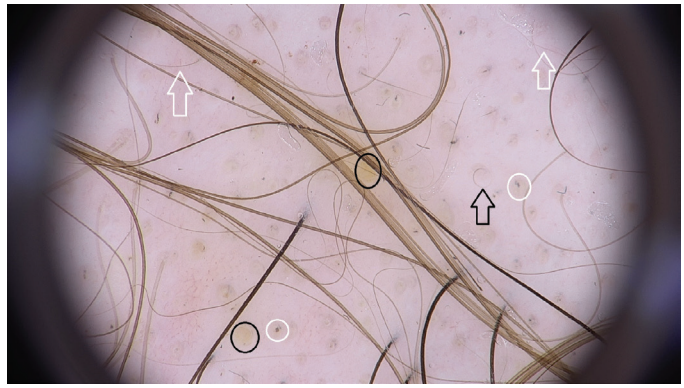

Figure 2. Trichoscopic analysis of the patient demonstrated empty yellow dots (black circles), black dots (white circles), pigtail hairs (black arrows), and short vellus hairs (white arrows)

Ethics

Informed Consent: The patient and her parent have given their written consent to use the patient's photographs and clinical information for publication.

Footnotes

Authorship Contributions

Surgical and Medical Practices: A.K.Ö., Y.H., G.G.A., Concept: A.K.Ö., Y.H., G.G.A., Design: A.B., Ö.D., A.A., Data Collection or Processing: A.K.Ö., Y.H., G.G.A., Analysis or Interpretation: A.K.Ö., Y.H., G.G.A., Literature Search: A.K.Ö., Y.H., G.G.A., Writing: A.K.Ö., Y.H., G.G.A.

Conflict of Interest: No conflict of interest was declared by the authors.

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