

# Androgenic alopecia: an entity to consider in adolescence

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## DESCRIPTION

A 15-year-old healthy adolescent girl went to her physician consultation because she was preoccupied with progressive thinning of her hair since 11 years old. In the last year, she noticed an aggravation, with an excessive hair loss. She does not have hirsutism, acne, asthenia, menstrual irregularities or weight variations. In her family history, she reported that her mother had 'excessive hair loss after pregnancy' and her maternal aunt has alopecia of unknown aetiology. At physical examination it was observed diffuse reduction of capillary thickness and density at the frontal scalp area (figure 1) and vertex (figure 2). Rare black dots were present and the pull test was negative. The analytical study including blood count, iron kinetics, thyroid function and hormonal study had no alterations. The pelvic and adrenal gland's ultrasound were normal. At dermatology consultation, scalp biopsy revealed findings compatible with androgenic alopecia. She started treatment with oral contraceptive, oral spironolactone and topical minoxidil solution, with improvement of alopecia areas.

Androgenic alopecia is the most prevalent form of alopecia in adulthood, but little is known about its prevalence, characteristics and natural history in paediatric population.<sup>1</sup> In children and adolescents with genetic predisposition, the first signs of androgenic alopecia may arise with increased levels of androgens at puberty, but the presence of androgenic alopecia in children with prepubertal testosterone levels and women with



Figure 2 Adolescent's scalp vertex.

## Learning points

- ▶ Androgenic alopecia may begin in adolescence, and its presentation is varied. In females, it is often manifested by a progressive hair weakening that may or may not be associated with hyperandrogenism.
- ▶ Usually, androgenic alopecia is a clinical diagnosis, but depending on the history and clinical evaluation, and especially in the paediatric age, additional diagnostic tests may be required.
- ▶ Alopecia may not have direct physical consequences for health but, certainly, it has an important psychosocial impact, especially in adolescence.

normal hormonal profiles, like in the case we reported, suggests that in some cases the 'female pattern hair loss' may not be androgen dependent or that adrenal androgens may have direct action.<sup>2,3</sup>

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Figure 1 Adolescent's scalp frontal area.



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