

## Concentric or Targetoid Regrowth in Alopecia Areata<sup>☆</sup>



### Crecimiento concéntrico en la alopecia areata (patrón en diana)

To the Editor:

Consultations for hair problems are very common in daily practice, with alopecia accounting for around 17.5% of all dermatologic consultations.<sup>1</sup> Methods of examination in trichology can be classified into 3 categories: non-invasive (medical history, general examination, inspection and palpation of the hair and scalp, photographs, dermoscopy, etc.), semi-invasive (trichogram), and invasive (biopsy).<sup>2</sup>

In this article we discuss a case of occipital alopecia areata (AA) in which hair repopulation adopted a distinctive distribution.

The patient was a 33-year-old man with no past history of interest. For the previous 6 months he had been followed up in dermatology for what we considered to be a single plaque of AA in the occipital region. Treatment with topical corticosteroids and minoxidil was prescribed in association with intralesional corticosteroids on 2 occasions.

At 1 of the follow-up appointments, examination revealed annular areas of growth of black hair at the vertex and in the occipital region (Fig. 1A), and the initial plaque of

alopecia had extended to the parietal region (Fig. 1B). The concentric areas of alopecia and hair repopulation produced a targetoid pattern (Fig. 2). Dermoscopy revealed numerous yellow and black dots and isolated fragmented hairs. A diagnosis of concentric or targetoid regrowth in AA was made and complete hair regrowth was achieved after a cycle of oral corticosteroids.

Cases of Köbner phenomenon have been described in AA, and other unusual forms of presentation, such as canities subita (Thomas More and Marie Antoinette syndromes), sisaipho, androgenetic alopecia, diffuse atypical forms, and transient rectangular alopecia.<sup>3,4</sup>

When hair regrowth occurs in AA, it is initially not uncommon to observe fine white hair or changes in hair texture (the hair may become straight or curly). Four paradoxical forms of hair regrowth exist: the castling phenomenon in which, after immunotherapy treatment with diphencyprone or squaric acid dibutylester, hair regrowth occurs in areas distinct from the site of application; the Renbök phenomenon, from the name Köbner written backwards, in which hair starts to grow on plaques of psoriasis or persists on congenital hairy nevi; perinevoid alopecia, characterized by hair loss around melanocytic nevi<sup>3,4</sup>; and targetoid or concentric regrowth, in which hair regrowth occurs in concentric rings at the vertex and in the occipital or parietal regions after treatment with topical immunotherapy, topical or intralesional corticosteroids, or even without previous therapy.<sup>5-7</sup> Dr Emilio del Río, one of the first to



**Figure 1** A, Annular areas of regrowth of black hair at the vertex and in the occipital region. B, Spread of the initial plaque of alopecia to the parietal region.

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**Figure 2** Concentric areas of alopecia and hair regrowth producing a targetoid pattern.

describe this phenomenon, considered that this finding is not as rare as the few published cases might suggest.<sup>8</sup> A number of hypotheses have been proposed to explain the phenomenon, including centrifugal accumulation of the corticosteroids because of application using the fingers,<sup>5</sup> a minimal aggression that produces AA with dystrophic hair that rapidly enters normal anagen,<sup>3</sup> or the normal clinical course of AA,<sup>9</sup> which, like an earthquake, starts at the center and spreads peripherally in waves<sup>6</sup> (spreading waves of anagen hair growth that reach refractory hair follicles in telogen giving rise to the typical concentric appearance).<sup>10</sup>

Although diagnosis is usually simple based on patient age, disease duration, and the medical history, the hair distribution can simulate other disorders that can present plaques of alopecia with an annular morphology or artifactual appearance. Trichotemnomania, a variant of trichotillomania in which sharp tools (scissors or razors) are used to cut the hair, has characteristic dermoscopic features such as the "V" sign, hair powder, and broken, spiral, flame, and tulip hairs, which help in its differentiation from AA. Lupus panniculitis can adopt an annular distribution following the Blaschko lines of the scalp. Traction alopecia, also called marginal

alopecia because it typically affects the frontal, temporal, and occipital hairlines, is a condition produced by prolonged or repetitive tension on the scalp due to hairstyles in which the hair is placed under tension; a typical finding in this condition is the border sign, which consists of the preservation of hairs along the original line of hair implantation, giving it an annular appearance. Finally, transitory neonatal hair loss in the occipital region can also present an annular morphology.

In conclusion, we have presented a new case of concentric or targetoid hair growth, a possibly underdiagnosed form of paradoxical hair regrowth in AA that needs to be recognized to avoid confusion with other types of alopecia.

## Conflicts of Interest

The authors declare that they have no conflicts of interest.

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## Ultrasound Image of Poroid Hidradenoma<sup>☆</sup>



### Imagen ecográfica del hidroadenoma poroide

To the Editor:

We present the case of a 57-year-old woman with allergy to codeine and a history of osteoporosis, systemic hypertension, allergic rhinitis, and anxiety. She was on treatment with metamizole, enalapril plus hydrochlorothiazide, ebastine, and alprazolam. She consulted for a stable, asymptomatic lesion that had arise approximately 4 years earlier on the right thigh and that had never been treated. Physical examination revealed a 7-mm-diameter, erythematous, desquamating papule with a central blood-stained scab (Fig. 1A) on the lateral surface of the distal right thigh. Deep to the papule was a lesion of rubbery consistency measuring 15 mm in diameter (Fig. 1B).

High-frequency skin ultrasound (15 MHz) was performed to determine whether this was a single lesion or 2 independent lesions (Fig. 2A). B-mode ultrasound showed a well-defined, hypoechoic lesion in the subcutaneous

cellular tissue; the lesion had a cystic appearance with a slightly more echogenic area on its right side. Immediately superficial to this cystic lesion, and in contact with it, was a well-defined, hypoechoic, exophytic dermal lesion. The epidermis was thickened. Doppler examination showed vessels at the periphery of the lesion, but not within it (Fig. 2B). These findings supported the clinical suspicion of a single lesion, and it was excised en bloc.

Histopathology showed a mixed solid-cystic, nodular dermal lesion (Fig. 3A) that focally made contact with the epidermis (Fig. 3B). The nodule was formed of poroid cells with round or oval nuclei, small nucleoli, and scant cytoplasm (Fig. 3C). Between the poroid cells were occasional larger cuticular cells that frequently lined ductal lumens (Fig. 3D). There was no evidence of atypia, mitoses, or necrosis. Based on these findings we made a diagnosis of poroid hidradenoma.

Poroid hidradenoma is a variant of eccrine poroma, which belongs to the group of poroid tumors described in 1990 by Abenoza and Ackerman.<sup>1</sup> Those authors described the 4 histological variants of eccrine poroma: hidroacanthoma simplex, classic poroma, dermal duct tumor, and poroid hidradenoma, which was the tumor in our patient.

To date, around 50 cases of poroid hidradenoma have been reported. Patient age varies between 13 and 86 years, with a peak in the sixth and seventh decades of life,<sup>2,3</sup> and a slight female predominance.

The tumor presents clinically as a solitary lesion, with no preferential anatomic site, though it has not been reported

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