Eyebrow pilomatrixoma preesenting with localized alopecia and skin hypopigmentation

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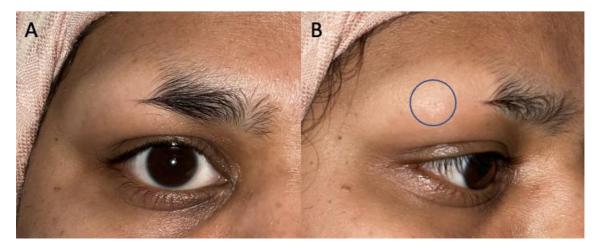


Figure 1. (A-B)

A 34-year-old woman presented with six months of painless hair loss and swelling in her right eyebrow. These symptoms developed gradually over a few weeks and had remained stable since then. There was no preceding trauma, and her medical history and systemic review were unremarkable. On examination, she had alopecia areata and hypopigmentation on the lateral two-thirds of her right brow (Figure 1A-B), with slight soft tissue swelling and a small palpable non-tender subcutaneous nodule in the centre of this hairless area (Figure 1B, circle), but no signs of ophthalmic pathology, sensory changes, or similar lesions elsewhere on her body.

Blood tests (including autoimmune profile), magnetic resonance imaging of the orbit and dermatology evaluation did not reveal any abnormalities. Excisional biopsy of the subcutaneous lump confirmed a pilomatrixoma with characteristic ghost and multinucleate cells (Figure 2A), and the overlying skin showed patchy chronic dermal inflammation with melanin and occasional melanocytes (Figure 2B). Dermatology recommended a trial of topical steroid (Eumovate). After 3 months of treatment, the brow hair loss and hypopigmentation remained unchanged.

Presentation of a pilomatrixoma with localised alopecia areata and skin hypopigmentation is extremely rare. There have been only three reports of pilomatrixoma presenting with alopecia areata^{1,2,3}, suggesting a potential association with microinflammation, as also seen in our case, and only one report of pilomatrixoma presenting with skin hypopigmentation.⁴

References

Disclosure statement

The report adhered to the ethical principles outlined in the Declaration of Helsinki as amended in 2013. Signed patient consent was obtained.

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¹ Shirai M, Fujimoto N, Nakanishi G, Tanaka T. Proliferating type pilomatricoma presenting with alopecia. European Journal of Dermatology 2012; 22: 564-5.

² Oishi K, Nishijima C, Kasashima S, Kawashima A, Inaoki M. Pilomatrixoma presenting with localized alopecia. European Journal of Dermatology 2016; 26(2): 198–199.

³ Zeren S, Fei C, Yanqin D, Yijia Y, Lulu Y, Jinghong X, Pilomatrixoma causing irreversible peripheral eyebrow shedding: A case report. Chinese Journal of Plastic and Reconstructive Surgery 2023; 5(1): 30-32.

⁴ Sinhasan SP, Jadhav CR, Bhat RV, Amaranathan A. Pilomatrixoma - Presented as Hypopigmented Tender Nodule: Diagnosed by FNAC: A Case Report with Review of Literature. Indian Journal of Dermatology 2013; 58(5):405.