Moth-eaten essential syphilitic alopecia

A 35-year-old man in good general health presented with a 5-month history of progressive patchy hair loss of the scalp. He had been diagnosed with alopecia areata 4 months earlier and treated with minoxidil without improvement. The hair loss had gradually spread over the whole scalp. He denied any recent sexual activity, and he had no history of genital or mouth ulceration. Physical examination revealed diffuse non-scarring, ‘moth-eaten’ patches of alopecia of the whole scalp (Figure 1). These patches of alopecia were free from other cutaneous lesions. His skin and mucosa appeared normal, as were his eyebrows and axillary and pubic hair. Serological screening for syphilis showed increased titers for rapid plasma reagin test (1:64), and Treponema pallidum agglutination assay was positive, supporting a diagnosis of secondary syphilis. He was treated with intramuscular injections of benzathine penicillin (2.4 million units) weekly for 4 weeks. Ten weeks later, the patient’s hair loss resolved, and there is no evidence of recurrence.

Alopecia syphilitica is an uncommon manifestation of secondary syphilis, occurring in only 4–12.5% of these individuals.1 It is non-inflammatory and non-cicatricial hair loss that can present in a diffuse pattern, a classic patchy moth-eaten pattern or a combination of both.2 Of these, moth-eaten alopecia occurred most frequently and most characteristic of alopecia syphilitica.1,3 The common mimickers of moth-eaten alopecia syphilitica include alopecia areata, tinea capitis and trichotillomania.

There are two types of syphilis-associated alopecia: ‘symptomatic syphilitic alopecia’ with other lesions of secondary syphilis and ‘essential syphilitic alopecia’ free from any other cutaneous manifestations.2 Essential syphilitic alopecia is extremely rare.4 Moth-eaten alopecia as the only cutaneous symptom of secondary syphilis as in our patient has rarely been described.

Syphilitic alopecia can closely resemble alopecia areata both clinically and histopathologically. The characteristic histologic features of alopecia syphilitica are follicular plugging; a sparse, perivascular and perifollicular lymphocytic infiltrate; and telogenization and follicle-oriented melanin clumping.3 Lee and Hsu5 reported that alopecia areata can be differentiated from alopecia syphilitica by the presence of peribulbal eosinophils. In our

Figure 1. Patches of hair loss on the whole scalp.
patient, positive serologic tests for syphilis and response to benzathine penicillin support the diagnosis of syphilitic alopecia.

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References


