

Answer to Dermacase *continued from page 647*

**4. Trichomycosis axillaris (TA)**

Trichomycosis, or *trichobacteriosis*, is a relatively common bacterial infection that affects the axillary and pubic hairs.<sup>1</sup> The causative organism is a Gram-positive diphtheroid *Corynebacterium* spp.<sup>1</sup> It is more commonly seen in people who live in warm and humid climates, as well as in those with poor hygiene.<sup>2</sup> The incidence is slightly higher in men. Clinical lesions of TA usually present on sweaty armpits, with no other apparent symptoms. Malodorous sweat is the main reason that patients seek medical treatment. On close-up physical examination, a small amount of visible, brownish to yellowish material called *concretions* can be seen to stick to the central portion of the hair shaft, which gives the hair a thickened and beaded silhouette. A potassium hydroxide test shows yellowish material with little translucency surrounding the involved hair without invading the hair cortex. On Wood lamp examination, the affected hair might produce a weak, yellowish fluorescence. A definitive diagnosis can be made according to these characteristic clinical presentations.<sup>2</sup>

Differential diagnosis should include *pedra*, *pediculosis*, and hair casts. *Piedra*, also called *trichomycosis nodularis*, is a superficial fungal infection involving the hair shafts of the scalp, axillary region, and genital region.<sup>1</sup> It can be further categorized into black or white *pedra*. Black *pedra*, caused by *Piedraia hortae*, is commonly seen in tropical climates, whereas white *pedra*, caused by *Trichosporon* spp, occurs mainly in subtropical climates.<sup>3</sup> Clinically, black *pedra* presents as firmly attached brown-black nodules on the hair shaft that make the hair fragile. White *pedra* manifests as whitish, loose, adherent material on the hair shaft that can be detached easily. Potassium hydroxide testing can be used to immediately differentiate *pedra* from TA, as *pedra* presents with fungal hyphae around the hair shafts. *Pediculosis* is a lice infestation, and it can be divided into *pediculosis capitis*, *pediculosis corporis*, and *pediculosis pubis*, with different causative organisms including *Pediculus humanus var capitis*, and *Pediculus humanus var humanus*.<sup>4</sup> Patients usually present with pruritic skin lesions. Nits attached to the hair can be easily seen. Nits carrying viable eggs and immature nymphs are close to the scalp, whereas nits carrying nonviable eggs are more distant from the scalp. The diagnosis is confirmed by the presence of viable eggs, immature nymphs, or adult lice. Hair casts, also known as *pseudonits*, predominantly affect young women<sup>5</sup> and are considered to be a



form of epidermal parakeratosis triggered by the inflammatory process or abnormal keratinization of the follicular infundibulum on the scalp.<sup>6</sup> However, hair casts might also occur without any pathologic scalp condition. Clinical lesions present as tiny, whitish nodules loosely coating the hair; they can be easily removed. No causative organisms can be found on microscopic examination or culture.

Shaving off all the axillary hairs is an effective way to treat TA. In addition, topical application of benzoyl peroxide or antibiotics such as erythromycin and clindamycin can prevent the recurrence of TA.<sup>2</sup> Moreover, in patients with axillary hyperhidrosis, an antiperspirant containing aluminum chloride hexahydrate might decrease sweating and prevent bacterial growth. Maintaining good local hygiene is recommended to prevent TA in susceptible individuals. 🌿

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**Competing interests**  
None declared

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