

Pseudofolliculitis barbae: a dermatoscopic correlate

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Report of a case

A 45-year-old man presented with a slightly tender rash on his face of about three months' duration. Past medical history was non-contributory. Physical examination revealed a solitary 1 cm erythematous nodule in the right submental area. Dermatoscopy showed a structureless pattern with a gray-blue, thick, curved line and adjacent red lines (Figure 1), which appeared to be a subcuticular suture, although the patient had no prior surgeries. A #22-gauge needle was used to unroof the nodule, revealing five black, coiled, beard hairs nestled deep into the dermis (Figure 2), the longest measuring 6 cm in diameter (Figure 3). These findings were most consistent with a diagnosis of pseudofolliculitis barbae accompanied by a characteristic foreign-body-like reaction to the retained hairs.

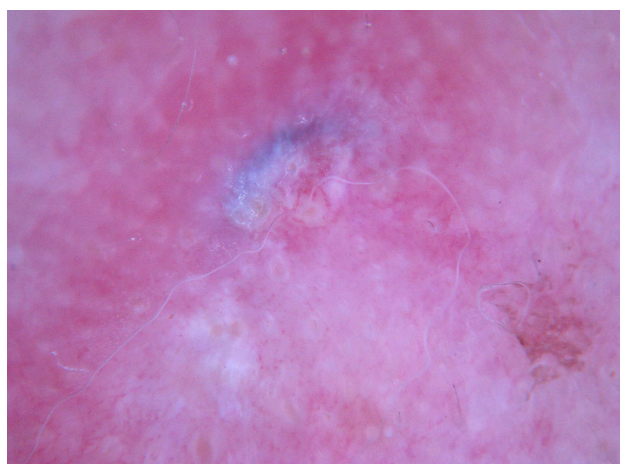


Figure 1. Dermatoscopy showing a structureless pattern with a gray-blue, thick, curved line and adjacent red lines. [Copyright: ©2013 Ladizinski et al.]

Discussion

Pseudofolliculitis barbae (also known colloquially as “ingrown hairs” or “razor bumps”) is a common chronic

inflammatory disorder occurring most often in regions of thick hair growth after shaving. Pathogenesis involves creating a sharp tip by shaving the distal end of the hair that enables intrafollicular and transfollicular penetration of

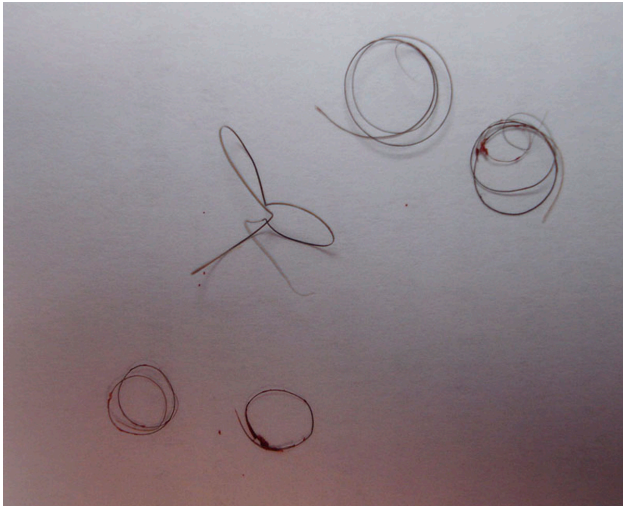


Figure 2. Following unroofing of the lesion with a 22-gauge needle, five black, coiled, beard hairs can be seen nestled deep into the dermis. [Copyright: ©2013 Ladizinski et al.]

thick hairs into the dermis [1]. As the hairs grow, they coil back into the dermis, causing an inflammatory reaction.

Pseudofolliculitis barbae is characterized clinically by multiple painful, pruritic erythematous papules and, less commonly, pustules, nodules, or abscesses hyperpigmentation, hypertrophic scars and keloids can also occur [2]. Our patient presented with a solitary inflammatory nodule with no previous history of pseudofolliculitis. Clinical examination was inconclusive.

Herein we present a unique dermatoscopic image of pseudofolliculitis barbae, which revealed a solitary gray-blue, thick curved line and adjacent red lines set upon a structureless pattern. These findings do not clearly correlate with known neoplastic entities. Based on the clinical appearance of an inflammatory nodule, basal cell carcinoma could be considered, however, branching vessels would be expected instead of the random cluster of straight red lines. Thick curved lines are typically seen in seborrheic keratosis. The gray and blue colors are consistent with melanin contained within the pigmented hair shaft in the dermis. According to current understanding, collagen fibrils that are present

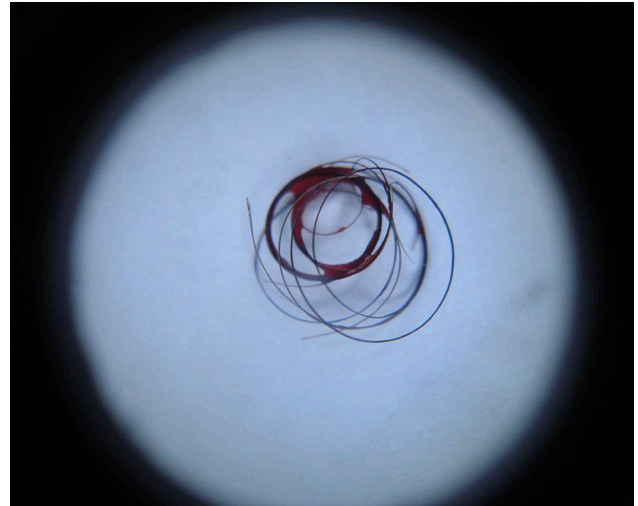


Figure 3. The longest of the coiled hairs measured 6 cm in diameter. [Copyright: ©2013 Ladizinski et al.]

in the dermis scatter light superficial to the deeper melanin pigment, and as blue light is scattered more than red light, the structure is seen by the dermatoscopist as gray or blue according to whether it is in the superficial or deep dermis, respectively. This is known as the Tyndall effect [3]. Given the associated structureless pattern, lichenoid keratosis should also be considered, however, this would not typically present as a nodule. In our case, the solitary gray-blue, thick curved line corresponds to the edge of the tightly coiled cluster of ingrown hairs in the dermis. The red lines most likely represent aberrant vessels secondary to a foreign body inflammatory reaction.

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