

## Bald Patch in the Beard

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**Figure 1.**

A 44-year-old man presented with a focal patch of hair loss in his beard that had been present for about two months. It was not itchy or painful. His history findings were unremarkable.

Physical examination revealed a well-circumscribed, hairless patch on the right jawline (*Figures 1 and 2*). The patch was 1 × 1 cm and smooth. There was no surrounding erythema or scale, and no cervical lymphadenopathy. There were no other lesions.

### Question

Based on the patient's history and physical examination findings, which one of the following is the most likely diagnosis?

- A. Alopecia areata.
- B. Cicatricial alopecia.
- C. Tinea barbae.
- D. Traction alopecia.
- E. Trichotillomania.

See the following page for discussion.



**Figure 2.**

**Discussion**

The answer is A: alopecia areata. This T cell-mediated autoimmune disease has a lifetime prevalence of about 2%.<sup>1</sup> It is characterized by a localized area of complete hair loss with normal skin pattern. Alopecia areata has a sudden onset and may involve the entire scalp (alopecia totalis) or the entire body (alopecia universalis).<sup>2</sup> Alopecia areata increases the risk of other autoimmune disorders.<sup>3</sup>

The diagnosis is usually made clinically; however, a skin biopsy may be performed if the diagnosis is unclear.<sup>1,4,5</sup> Spontaneous remission is common and usually occurs within six to 12 months.<sup>1,2</sup> Topical, intralesional injection and, occasionally, systemic glucocorticoids are used for treatment.<sup>1,2,5</sup> Immunomodulating agents (e.g., irritant dithranol, diphenylcyclopropenone) and topical minoxidil have been used with variable results.<sup>1,4,5</sup>

Cicatricial alopecia is permanent hair loss caused by destruction of the hair follicles by inflammatory or autoimmune diseases, commonly discoid lupus erythematosus.<sup>2,5</sup> The condition causes folliculitis and eventually leads to scarring and skin atrophy.

Tinea barbae is an uncommon fungal infection that most often occurs in farm workers.<sup>6</sup> It usually causes pruritic, erythematous, and scaling patches with fragile, broken hairs.<sup>2,5</sup> Pulling infected hairs is usually painless.<sup>6</sup>

Traction alopecia is unintentional hair loss due to high-tension grooming style.<sup>2,5</sup> Although it can occur in the beard, it is more common on the scalp. In rare cases, chronic traction alopecia results in folliculitis and scar formation.<sup>5</sup>

Trichotillomania is a compulsive disorder that involves repetitive hair pulling.<sup>2,5</sup> The most common location is the scalp.<sup>2</sup> Scar formation occurs in rare cases.<sup>2,5</sup>

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**Summary Table**

Condition	Characteristics
Alopecia areata	Sudden onset; localized hair loss with normal skin pattern
Cicatricial alopecia	Folliculitis; scarring and skin atrophy
Tinea barbae	Pruritic, erythematous, and scaling patches with fragile, broken hairs
Traction alopecia	Patchy; related to high-tension grooming style; more common on the scalp; occasional folliculitis and scar formation
Trichotillomania	Patchy; chronic course; incomplete thinning; occasional scarring; associated with psychological conditions

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