# Recalcitrant folliculitis with hair loss

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**A man presents with a crusted folliculitis that has failed to respond to antibiotics. What are these lesions and how can they be treated?**

A 45-year-old man developed multiple, nontender, violaceous and focally crusted follicular lesions on his left shin. Despite multiple courses of antibiotics, which he received over a 12-month period, fresh lesions developed and older lesions resulted in areas of hair loss and mottled pigmentation (Figure 1). A deep skin biopsy showed a marked mixed inflammatory reaction with a granulomatous component in the deep dermis surrounding a loose hair shaft in the subcutis (Figure 2). Closer examination of the hair shaft revealed rows of spores (Figure 3).

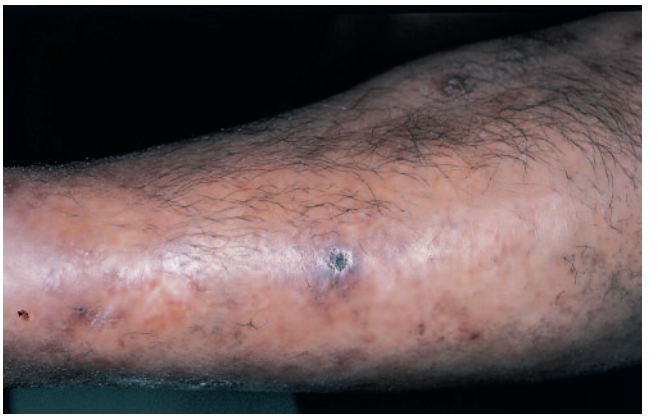
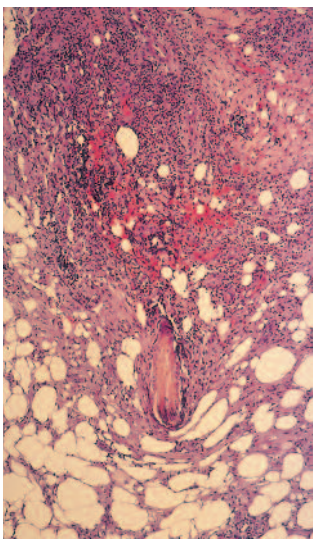


Figure 1. Crusted and inflamed papules on the leg, surrounded by areas of hair loss and patchy hyperpigmentation.



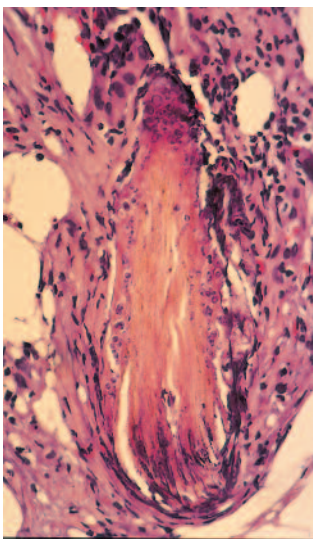


Figure 2 (left). Marked inflammation in the deep dermis, with a granulomatous reaction around a deep hair shaft.
Figure 3 (right). Detail of the hair shaft, demonstrating rows of blue spores.

## Diagnosis

A folliculitis that fails to respond to antibiotics may represent a number of conditions.

- **Chemical or oil folliculitis** may induce a sterile pustular folliculitis that can also be associated with comedones. Review of the occupational history is a key to diagnosis.
- **Eosinophilic folliculitis** presents as itchy, crusted or pustular follicular lesions that are associated with an urticarial papular element. Infestation, insect bites or AIDS-related folliculitis are the main bases. Skin biopsy reveals eosinophils within and around hair follicles, with lymphocytes and scattered neutrophils.
- **Viral folliculitis** due to herpes simplex usually presents as recurrent, localised, crusted papules. Disseminated lesions may be seen in immunocompromised individuals. Skin biopsy reveals viral cytopathic changes within the follicle, and herpesvirus may be identified by culture or antibody markers.
- **Fungal folliculitis** due to dermatophytosis is the correct diagnosis. Examination of the feet and nails for clinical evidence of fungal infection may be a helpful clue.

A range of dermatophytes, including *Trichophyton tonsurans* and *Microsporum canis*, may induce follicular pustules, violaceous papules or black dots due to hair breaking at the skin surface. Skin biopsy or culturing hairs for fungi will confirm the diagnosis. Oral antifungals are needed for therapy because of the deep-seated fungi that may extend to the subcutis in hair shafts. Griseofulvin (Fulcin, Griseostatin, Grisovin) may not be effective, and newer antifungals, including terbinafine (Lamisil Tablets), ketoconazole (Nizoral), itraconazole (Sporanox) or fluconazole (Diflucan) may be required, particularly in relapsing cases.

## Keypoint

Fungal folliculitis on the legs may masquerade as a bacterial folliculitis. MT

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