# The corkscrew and comma-shaped hairs of tinea capitis



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#### **CLINICAL PRESENTATION**

A 33-year-old woman presented with a 2-month history of pruritic eruption and hair loss on the temporal aspect of the right side of the scalp. On clinical examination, focal hair loss with black dots visible within the follicles was observed. Wood's light examination revealed no fluorescence (Fig 1).



Fig 1. Clinical image of the patient's temporal aspect of the right side of the scalp.

## **DERMATOSCOPIC APPEARANCE**

Dermatoscopic examination revealed comma-shaped, coiled, and corkscrew-like hairs emanating from hair follicles (Fig 2).

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Fig 2. Dermatoscopic image of the patient's temporal aspect of the right side of the scalp with commashaped (white arrows) and corkscrew hairs (black arrows).

## **KEY MESSAGE AND HISTOLOGIC DIAGNOSIS**

The dermatoscopic findings are characteristic of tinea capitis and are thought to be the result of the invasion of the hair by fungi commonly found in the Trichophyton or Microsporum genera. Comma-shaped hairs are found in both Trichophyton and Microsporum infections, whereas corkscrew hairs are more commonly found in infections by Trichophyton and are thought to be the result of its endothrix invasion of the hair shaft. Wood's light examination of the hair would reveal bright-green fluorescence with most Microsporum infections, faint-blue fluorescence with Trichophyton schoenleinii, and no fluorescence with Trichophyton tonsurans and Trichophyton verrucosum. Here, the combination of the clinical examination, lack of Wood's light fluorescence, and presence of corkscrew hairs suggest infection by fungi in the Trichophyton genera—the most common of which being infection by Trichophyton tonsurans.

Our patient was treated empirically with daily terbinafine (250 mg) for 6 weeks with resolution. The fungal culture of the skin and hair ultimately identified Trichophyton tonsurans.

#### Conflicts of interest

None disclosed.

### REFERENCE

1. Waśkiel-Burnat A, Rakowska A, Sikora M, Ciechanowicz P, Olszewska M, Rudnicka L. Trichoscopy of tinea capitis: a systematic review. Dermatol Ther (Heidelb). 2020;10(1):43-52. https://doi.org/10.1007/s13555-019-00350-1