

key points

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Dermatophyte fungi are confined to the keratin layer

of the epidermis and include three genera: *Microsporum*, *Epidermophyton* and *Trichophyton*. These infections can be transmitted by human contact (anthropophilic), from the soil (geophilic) and by animal (zoophilic) spread.

The clinical features of tinea capitis include patchy

hair loss with varying degrees of scale, erythema and pustules. Infected hairs tend to break at the base, leaving stubble. Occasionally, there is invasion of the visible epidermis, resulting in a boggy, painful swelling with associated alopecia and regional lymphadenopathy known as a kerion.

Any dermatophyte species affecting the body can

affect the hands. The most common organism is *T. rubrum*. Tinea corporis infection affects the trunk mainly in children and adolescents, and all genera of dermatophyte can cause it. Tinea cruris infection involves the groin region and is more common in men than women. *T. rubrum* is the most common causative dermatophyte.

Dermatophyte infections usually present as an

erythematous, scaly eruption, which may or may not be itchy. Asymmetry is an important clinical clue to fungal infection, as is annular morphology. Examination under ultraviolet (Wood's light) can be helpful. The gold standard for diagnosing cutaneous fungal infections is microscopy and culture of scale, hair or nail, and a definite diagnosis is desirable before commencing treatment, especially with oral therapy.

Inappropriate treatment of tinea infections with

topical corticosteroids may alter the morphology of the eruption to produce the characteristic appearance of tinea incognito. Most localised tinea infections can be treated topically with antifungals. In order to prevent relapse, topical therapy should be continued one to two weeks after resolution of symptoms. The imidazole antifungals (clotrimazole, ketoconazole and miconazole) are all effective against dermatophytes. Systemic treatment may be initiated if topical treatment is unsuccessful. Oral imidazole or triazole antifungals such as terbinafine, itraconazole and fluconazole are frequently used as they have a broad spectrum of activity and require a shorter duration of treatment.