



## A Fungal Infection of the Fingernails of Onychomycosis

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### EDITORIAL

Onychomycosis, also known as tinea unguium, is a fungal infection of the nail. Symptoms may include white or yellow nail discoloration, thickening of the nail, and separation of the nail from the nail bed. Toenails or fingernails may be affected, but it is more common for toenails to be affected. A nail fungus causing thickened, brittle, crumbly or ragged nails. The main symptoms are changes in the appearance of nails. Rarely, the condition causes pain or a slightly foul odour. Treatments include oral anti-fungal drugs, medicated nail polish or cream or nail removal. Onychomycosis does not necessarily require treatment. The antifungal medication terbinafine taken by mouth appears to be the most effective but is associated with liver problems. Trimming the affected nails when on treatment also appears useful. There is a ciclopirox-containing nail polish, but there's no evidence that it works. The condition returns in up to half of cases following treatment. Not using old shoes after treatment may decrease the risk of recurrence. It occurs in about 10 percent of the adult population. Older people are more frequently affected. Males are affected more often than females. Onychomycosis represents about half of nail disease. The diagnosis is generally suspected based on the appearance and confirmed by laboratory testing. The four main tests are a potassium hydroxide smear, culture, histology examination, and polymerase chain reaction. The sample examined is generally nail scrapings or clippings. These being from as far up the nail as possible.

Nail plate biopsy with periodic acid-Schiff stain appear more useful than culture or direct KOH examination. To reliably identify nondermatophyte molds, several samples may be necessary. Although not life-threatening, onychomycosis

constitutes an important public health problem because of its high prevalence and associated morbidity. The disease can have certain negative consequences for patients, such as pain, and can potentially undermine work and social lives. This review discusses the etiology, classification, diagnosis, and treatment. Four types of onychomycosis are recognized based on the site and pattern of fungal invasion. Dermatophyte fungi are the predominant pathogens, but yeasts and nondermatophyte molds may also be implicated. Accurate diagnosis requires direct microscopy and fungal culture. The differential diagnosis includes psoriasis, lichen planus, onychogryphosis, and nail trauma. Onychomycosis is more difficult to treat than most dermatophytoses because of the inherent slow growth of the nail. Older antifungal agents are unsuitable for onychomycosis because of their relatively poor efficacy and potential adverse effects. Three recently developed antimycotic agents offer high cure rates and good safety profiles. In addition, the short treatment times and intermittent dosing schedules are likely to enhance compliance and reduce the costs of therapy.

Onychomycosis traditionally referred to a nondermatophytic infection of the nail but is now used as a general term to denote any fungal nail infection. In spite of the clearly diseased appearance associated with this condition, onychomycosis is all too often regarded as merely a cosmetic problem of relatively minor importance that is hardly worth the effort to resolve. This belief may have been supported by the adverse effects and long dosing courses associated with some of the earlier antifungal agents. Onychomycosis is a fungal infection of the toenails or fingernails that may involve any component of the nail unit, including the matrix, bed, or plate. Onychomycosis can cause pain, discomfort, and disfigurement and may produce serious physical and occupational limitations.

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