**Fungal infection of the nails**

**What is a fungal infection of the nail?**

Fungal infections of the nails are also known as onychomycosis, as tinea unguium, and as ringworm of the nails. The fungi in question are usually those that cause athlete’s foot – a common infection of the skin of the feet. In athlete’s foot the fungi live in the keratin that makes up the outer layer of the skin, but they can also invade the hard keratin of which nails are made. When this happens, the result is a fungal infection of a nail.

**What causes onychomycosis?**

Fungi spreading from athlete’s foot (known as ‘dermatophyte fungi’) cause most fungal nail infections. Far less often a nail infection is due to other types of fungi, usually yeasts (eg. Candida) and moulds (eg. Scopulariopsis), which do not cause athlete’s foot. These like to attack nails that are already weak, perhaps after an old injury. Fungal infections of toenails are common, those of fingernails far less so. Both are seen most often in the elderly.

**Are they hereditary?**

No, but several family members may have them at the same time because they can catch them from each other.

**What are the symptoms of fungal infections of the nails?**

At the start, there are usually no symptoms. Later the nails may become so thick that they hurt when they press on the inside of a shoe. They are then hard to trim. The look of an infected nail, particularly a fingernail, can be embarrassing.

**What do fungal infections of the nails look like?**

When fungi invade a nail, they usually start at its free edge, and then spread down the side of the nail towards its base. Eventually the whole nail may be involved. The infected areas turn white or yellowish, and become thickened and crumbly. Less common patterns of infection include white patches or streaks on the nail surface. The nails most commonly affected by fungal infections are those on the big and little toes. When several fingernails are infected, they are usually on the same hand.

**How are fungal infections of the nail diagnosed?**

Many nail problems can look like a fungal infection - for example the changes seen in psoriasis, or after a bacterial infection or an old injury – but long courses of antifungal tablets will not help them. This is why the diagnosis of a fungal infection must always be confirmed before treatment starts. Your doctor will take a piece from a crumbly area of your nail and send it to the laboratory to check if a fungus can be seen under the microscope or grown in culture. The right treatment may depend on knowing which fungus is causing the trouble but it can take several weeks for the final culture results to come through.

**Can fungal infections of the nails be cured?**

Yes - usually they can.

For information about available treatments please go to  [this page](http://www.bad.org.uk/site/820/default.aspx)on the website of the British Association of Dermatologists

