

onychomycosis or fungal infections which can be significantly trimmed away.

- This treatment is non-harmful and can be done on site at Shepparton Foot Clinic.

Oral Antifungal Medication

- Terbenifine (eg. Lamisil) is currently the most common oral drug used for onychomycosis.
- A prescription from a prescribing podiatrist or your doctor is required to obtain oral Terbenifine.
- Pathology confirmation of a fungal infection is required to obtain Terbenifine on the Pharmaceutical Benefits Scheme if prescribed by your medical doctor.
- This will mean having a sample of the nail sent to pathology.
- A nail sample may be collected for pathology by your podiatrist.
- Oral medication is taken for between three to six months before improvement in the nail becomes evident.
- Terbenifine can cause side effects such as liver disease or skin or stomach problems and topical Terbenifine can induce subacute cutaneous Lupus erythematosus and should be avoided if there is a history of this condition.



Other Notes

Check with the pharmacist before purchasing anti fungal treatments regarding interactions with other drugs.

NB: Nail trauma or other diseases such as Psoriasis, Scleroderma or Lupus can cause damage or thickening of the nails which may appear similar to fungal infections. And any nail damage may also predispose nails to secondary fungal infections. So treatment of the fungus may help to reduce or destroy the onychomycosis but still not improve the shape of the nail.

Your podiatrist is the best professional to diagnose and treat fungal infections of the nails.

If you have this or any other foot related issue, see us at Shepparton Foot Clinic for a caring professional podiatry opinion.

**Shepparton Foot Clinic,
where we help your 'Feet for Life'**

Shepparton Foot Clinic has been providing top quality, friendly and reasonably priced podiatry to Shepparton and the Goulburn Valley since 1983.

Conveniently located in central Shepparton, we have parking on site and easy wheelchair access to our clinic.

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Fungal Infections



Tinea Pedis (Athlete's Foot) The Cause of fungal infections

Fungal infections of the foot appear in two main sites. The skin and the nail.

Sometimes a fungal infection is a result of direct contact with an active fungal infection from a floor in a wet area such as around swimming pools or in showers. The dark moist environment of footwear provides the ideal breeding ground for fungal growth.

Sometimes a fungal infection is due to an overgrowth of normal fungus present on the skin. This may occur in circumstances where immune resistance is low or conditions for fungal growth are optimum where the resident flora then has ideal growing conditions resulting in an infection, either bacterial or fungal.

The cause of poor immune resistance may be due to the use of antibiotics (these kill bacteria therefore fungi becomes more numerous) or may be a result of a systemic condition such as diabetes.

What does it look like?

Tinea pedis manifests on the foot in three ways:

1. As interdigital maceration (white soggy skin) which may be accompanied by fissures and a distinct odour.
2. As patches of itchy skin on the sole of the foot. These patches are often red and have a recurring nature. The instep of the foot is a common place for these patches to occur.
3. The entire bottom of the foot may become scaly, red and irritated.

How to treat skin fungal infections

- There are a number of antifungal creams, sprays and powders available from pharmacists without prescription. Anti-Fungal treatments basically come in either fungicidal (kills fungus) or fungistatic (stops fungus from reproducing) formulae.
- Fungicidal solutions work by destroying fungal cell walls. These solutions need to be used twice per day for about 2 weeks. An example of a fungicidal cream is Terbenifine (eg. Lamisil). (NB: Topical

Terbenifine can induce subacute cutaneous Lupus erythematosus and should be avoided if there is a history of this condition)

- Fungistatic anti-fungals work by inhibiting the development of fungal cell walls. These solutions should be used twice per day for about 4 weeks, the full reproductive cycle of a fungus. Examples of fungistatic solutions include Miconazole (eg. Daktarin) and Clotrimazole (eg. Canestan) which is also effective against candida (yeast) infections.
- Some anti-fungals may also be combined with cortisone solutions to assist with reduction of itch and inflammation. These usually relieve the itch of a fungal infection within an hour of application. They should only be used for 7 days until the itch subsides and then changed to the standard formula without cortisone. Examples of combined formulas are Hydrozole (Clotrimazole + 1% Hydrocortisone) and Daktarin Plus (Miconazole + 1% Hydrocortisone)

Photodynamic light therapy (PDT):

- PDT is a topical treatment for fungal infections using a red light and blue gel.
- The basis of PDT is the interaction of light with photosensitive agents to breakdown the fungal cells infecting the skin or nail.
- PDT is available at Shepparton Foot Clinic and is used on resistant fungal infections of the skin with great success (See below for more detail on PDT)

Onychomycosis (Fungal infection of the nail)

Fungal infections of the nail are relatively common and they can be difficult to treat.

What do nail fungal infections look like?

Onychomycosis usually presents as two distinct types.

1. Superficial white plaques. This usually presents in early stages of a fungal nail infection. It commonly occurs on nails occluded under overlapping toes or sometimes under thick nail varnish. If the infection is diagnosed at this stage treatment is much easier.

2. More complex onychomycosis appears as a thickened yellow or brownish nail and nail bed with dead skin build-up in and under the free edge of the nail.

How to treat nail fungus

Nail fungal infections can be treated with either topical or oral treatments.

Topical treatments:

- **Nail lacquers:** The infected area of the nail is filed prior to application of nail lacquer with a disposable file or sand-paper. Lacquers are applied once to three times per week for between 12 to 24 weeks, with more success on superficial than full thickness nail infections.

Some nail lacquer examples include:

- **Amorolfin (eg. Loceryl).** Claims to have a cure rate of about 60% of superficial fungal nail infections when used for about 3 months. This reduces to a cure rate of about 30% after 6 months.
- **Miconazole (eg. Daktarin).** May be effective clearing or preventing the spread of superficial fungal infections.

Other topical options include:-

Photodynamic light therapy (PDT):

- The basis of PDT is the interaction of light with photosensitive agents to breakdown the fungal cells infecting the skin or nail.
- Standard PDT therapy requires trimming and filing away most of the infected area of nail and the application of a blue gel which connects to the fungal cells.
- A red light then causes the gel to attract oxygen which destroys the fungal cell walls.
- The treatment is applied three treatments over two weeks.
- Light therapy has been shown to have good effects in skin infections and the treatment of superficial