

## Fungal Nail Infection.

Fungal infection of the nails, whether toes or fingers, is known as Tinea Ungus or Onychomycosis and is caused by the same dermatophytes that can lead to athletes' foot. About 3 in 100 people will have a fungal nail infection at some stage and it is more common in people over 55.

### How do you get a fungal nail infection?

- It can spread from a skin infection on the foot to the toe nails or the finger nails if you scratch itchy toes or pick the infected skin.
- A damaged nail whether through trauma or bad cutting is more likely to become infected. The nail cuticle and skin under the nail is a natural barrier or seal to prevent infection getting under the nail. If this barrier is broken the nail bed is under threat to infection.
- An increased risk of infection occurs in people with diabetes, psoriasis, those with a poor circulation or in general poor health.

### What are the symptoms?

Often just one nail is affected but if let untreated it can spread to all nails. Initially a pale white area appears where the nail is lifted away from the nail bed and as the infection progresses the nail turns a greeny-yellow colour and the nail becomes powdery and crumbly and bits of the nail break away. The skin around the nail can become inflamed and painful and in some cases scaly. In extreme cases the nail and the nail bed are destroyed and walking in closed in shoes becomes painful.

### What treatment is available?

If caught early treatment can prevent the fungus catching a hold; the nail will regrow, re-attach itself to the nail bed and in 50% of cases a normal nail will result. Two types of treatment are available, tablets and antifungal paint. Tablets taken orally for 4 - 6 months have a greater success rate but the side effects can preclude some from the treatment. Antifungal paint needs to be applied daily and each month the dried liquid filed away to maintain the efficiency of the liquid. This initially kills off the fungus but the regime has to be continued until the new nail has fully regrown to prevent reinfection. The treatment is often more effective if the crumbly nail is drilled down and removed by a Podiatrist first which for women is cosmetically better carried out in the winter.

## Burchell & Associates

30 Farley Road, South Croydon, Surrey. CR2 8DA  
020 8657 1648/6933 Fax 020 8651 4199. selsdon@burchellsfeet.co.uk

210 Fulham Palace Road, Hammersmith, London. W6 9NT.  
020 7385 0554 Fax 020 7386 0935 fulham.palace@burchellsfeet.co.uk

99 Moore Park Road, Fulham, London. SW6 2DA  
020 7736 4715 moore.park@burchellsfeet.co.uk



The Society of  
Chiropodists  
& Podiatrists

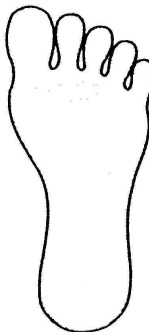
## M B Burchell & Associates

MChS DPoDM

HPC Registered Podiatry

## FUNGAL INFECTIONS (Athletes Foot)

A helpful guide to understanding what they are  
and the treatments available.



## Fungal Infections.

### What is athlete's foot?

It is a skin or nail infection most commonly caused by fungi that are called dermatophytes which are found on human skin as part of our natural fauna and in warm moist environments such as pools, showers and changing rooms. However, if conditions are right the dermatophytes multiply, 'invade' the skin, and cause infection. Fungal infection is said to affect 70% of the population at some time and has a higher incidence in males and is less common in children.

The 3 common types of fungi that cause us problems are: Trichophyton Rubum, Trichophyton Interdigitale and Epidermophyton Floccosum and are also known as 'ringworm' or 'tinea'. The location of the area infected gives the condition its name.

▪ **Tinea Pedis, (athlete's foot)** - There are 3 main types associated with the foot, but the condition mainly occurs between the toes where it is dry with scaling or moist with peeling and fissuring.

◦ **Interdigital Tinea Pedis** is the most common form and usually the first to develop. It occurs between the toes especially the 3<sup>rd</sup> & 4<sup>th</sup> and commonly spreads onto the top of the foot and under the toes. It can be red, dry, scaly and cracked or white and soggy. It can be itchy and give a burning or painful sensation and can cause a nasty smell. This is generally caused by *all three types of fungi*.

◦ **Moccasin Tinea Pedis** presents as a mild redness with mild to profuse scaling and a powdery dryness which is worse in the folds of the skin and minute blisters around the margins of the infection. It can cover the sole of the foot and extend around the heel and side of the foot. It is named because the area is said to resemble a moccasin shoe. This is generally caused by Trichophyton Rubum.

◦ **Acute Vesicular Tinea Pedis** is characterised by a rapid onset of fluid filled blisters over the top of arch area of the foot usually originating from the interdigital spaces and often involving a bacterial infection. It is made worse by breaking the blisters. This is generally caused by Trichophyton Interdigitale and Epidermophyton Floccosum.

Other areas that are affected by the fungi are: Tinea Manuum, (hand), Tinea Cruris, (groin), Tinea Corporis, (body/trunk), Tinea Facialis, (face), Tinea Unguis or Onychomycosis, (nails). The nails often become yellowy, thick and crumbly.

### How do you get it?

Anyone can develop athlete's foot. Since the fungi are naturally present on our skin everyone is susceptible to Tinea Pedis if they provide the right conditions on the foot for the infection to thrive on. Excessive sweating and the continual wearing of occlusive footwear is the main reason for the ideal conditions developing. Remember the fungi love warm, moist and dark areas. The fungi can also be spread From person to person in areas such as communal via small flakes of skin that the

body naturally sheds when walking bare foot. It may then be trodden on by others who can develop the infection if the area of contact is not kept dry. The occurrence of Tinea Pedis is relatively high in semi tropical climates where shoes are worn but is relatively uncommon where walking barefoot or in sandals is the norm. The average healthy adult has a naturally high immunity to fungal infections however diabetics can be prone due to the increased level of sugar in the blood. Other factors are genetic, age, nutrition and hormone balance.

### What treatment is available?

Tinea Pedis can spread quickly to any area of the skin or nails so treatment needs to be effective to prevent spread and re-infection and continued several months after the signs have cleared to decrease the chance of reoccurrence. All types of Tinea can be effectively treated if the area is prevented from becoming warm, dry and dark, the conditions that allow the fungi to multiply. In chronic or persistent your GP can prescribe tablets orally however there are side effects and thought needs to be taken before they are considered.

◦ **Interdigital Tinea Pedis:** allow the area to be exposed to the air and apply a liquid or a spray to the area daily until the condition clears and then for a further two months.

◦ **Moccasin Tinea Pedis:** although this type responds quite slowly, a cream applied daily clears the infection up in 83% of cases after one month; however there is a high reoccurrence rate and continual treatment is required to control it.

◦ **Acute Vesicular Tinea Pedis:** a cream should be rubbed over and around the area trying to ensure the blisters do not break. Where the blisters are broken a dry dressing should be applied afterwards to prevent secondary infection. If a bacterial infection is present antibiotics taken orally should be considered.

### Can it be prevented?

- Wash your feet and toes daily.
- Dry the skin between your toes thoroughly after washing or swimming.
- If you have an infection do not share towels in communal changing rooms.
- Change socks daily. Fungi may multiply in flakes of skin in socks. Wear cotton or woollen socks rather than nylon.
- Try to alternate between different shoes every 2 or 3 days to allow each pair to dry out fully after being worn, especially in the summer.
- Wear flip-flops or sandals in communal changing rooms and showers to prevent your feet coming into flakes of skin from other feet.
- When at home leave socks and shoes off to let the air get to your feet.

continued overleaf