

# Information Leaflet for Patients

# SCALP RINGWORM: A FUNGAL INFECTION OF THE HEAD AND SCALP HAIR

### The aim of this leaflet

This leaflet is designed to help you understand more about scalp ringworm. It tells you what this condition is, what causes it, what can be done for treatment, and precautions to take.

# SCALP RINGWORM: A FUNGAL INFECTION OF THE HEAD AND SCALP HAIR

#### What is scalp ringworm?

Scalp ringworm is **not** a worm infection but is actually caused by a type of fungus. The medical name is *tinea capitis*. The fungi (plural for fungus) are very small organisms (*microbes*) called *dermatophytes*, which can live on hair and on the skin of the scalp. The infection is mainly seen in children.

#### How does infection spread?

There are different types of *dermatophytes*. Some are found on humans and can be passed from one person to another (called *anthropophilic* transmission). Other *dermatophytes* normally infect animals such as cats or dogs, but can occasionally be transferred from an animal to a human to cause infection (*zoophilic* transmission). Fungal infection of the scalp is most common in children (toddlers and schoolage children) where it can sometimes cause small epidemics, as it is contagious.

## What does scalp ringworm look like?

The signs and symptoms may vary, but usually one can see patches of hair loss, broken hairs, and scaling. In people with black hair, broken hair stubs or black dots are visible in the affected area. Sometimes the infection is more inflamed with redness of the scalp, scales, and even *pustules* (inflammatory lesions that are raised and pus-filled) or "white heads" (non-inflammatory *comedones*). In severe cases, a larger mass with crusts develops, resembling an abscess filled with pus. This is also called *kerion*. If untreated, this severe form of infection may cause permanent hair loss or scarring.

# How is scalp ringworm diagnosed?

Apart from inspecting the hair, your doctor may also examine the scalp with a small surface magnifier called a dermatoscope. The diagnosis is confirmed by testing damaged hair and skin scales in a laboratory

for the presence of fungi. It is important to know which dermatophyte is causing the infection, as some are transmitted between humans as described above, and others are transmitted from an animal to a human. The source of the infection should be found and treated in order to prevent further cases. In the clinic, samples to be sent to the laboratory are taken by passing a small disposable scalp brush (like a toothbrush) through the hair, or by gently scratching the affected area with a brush or blade. Sometimes, brush samples are also taken from other children in the family even if they have normal-appearing scalps, as they may be infected with the fungus.

#### How is scalp ringworm treated?

Fungal infection of the hair and scalp is usually treated orally with tablets or a liquid. The doctor chooses the medication depending on which type of fungus is found in the hair. The medicines most commonly used are griseofulvin, terbinafine, itraconazole, or fluconazole. Some of these drugs are not obtainable in all European countries, but your local clinician will know which antifungal is available in your country. The course of treatment lasts for 4-6 weeks.

Your clinician will check your hair regularly for improvement and may also take samples for fungal examination.

The tablets are commonly supplemented by the use of medicated shampoo or creams that contain antifungal medication. These are used to prevent the spread of infection. In cases where the fungus can spread to other children, unaffected children in the family may also be treated with a medicated shampoo.

# Is your child allowed to attend school, nursery, or kindergarten?

In many European countries, children with scalp ringworm are allowed to attend school, nursery, or kindergarten after appropriate therapy has been initiated. In other countries, children are excluded from school for 2 weeks after the start of treatment; your clinician will be able to advise you on local recommendations.

#### What precautions should I take?

- Inform the school, nursery, or kindergarten and playmates if your child has an infection that can be passed on to other children. This will allow other parents to arrange for their children to be examined and treated early, if necessary.
- In cases where there is animal to human transmission (e.g. from a cat or a dog), the animal should be examined and treated by a veterinarian.
- Until the infection has been successfully treated, family members and classmates should not share hairbrushes, hats, towels, and other personal items, and the child should not go to a hairdresser.



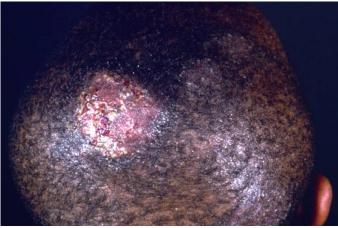


Fig. 1 and 2: Two children with different hair types affected by tinea capitis



While every effort has been made to ensure that the information given in this leaflet is accurate, not every treatment will be suitable or effective for every person. Your own clinician will be able to advise in greater detail.