TINEA CAPITIS (or SCALP RINGWORM)

What are the aims of this leaflet?

This leaflet has been written to help you understand more about tinea capitis. It tells you what it is, what causes it, how it can be treated, and where you can find out more about it.

What is tinea capitis?

Tinea capitis or ‘scalp ringworm’ as it is more commonly known, is the name used to describe an infection of the scalp hair with a type of fungus. Fungi are tiny microscopic organisms that can live on the dead tissue of the hair, nails, and outer skin layer.

It is an infection which occurs most commonly in children; however, it can also occur in adults.

What causes tinea capitis?

Tinea capitis is caused by fungi called dermatophytes, of which there are many species. Dermatophytes are found in humans, animals and in the environment.

Is tinea capitis contagious?

Tinea infections are contagious. Most common infections occur with certain species of fungi that thrive in crowded living conditions and warm, damp environments. The fungus can contaminate hairbrushes, clothing, towels and the backs of seats. They can live for long periods of time in the environment and therefore infection can occur many months later.

It can also occur due to direct contact with an infected animal, including household pets, but these infections are not generally passed from one person to another.
What are the symptoms of tinea capitis?

The most common symptoms of tinea capitis are itching, redness and scaling of the scalp which can look like dandruff. Sometimes these areas are associated with hair loss, and bald patches can occur as infected hairs are brittle and break easily.

In more severe cases there can be swelling and pus from the infected areas; some children may develop a fever or swollen glands in the neck.

Occasionally the body's immune response to the fungus can also trigger an itchy rash at a distant site such as the ear or the palms and soles. This is called as an ‘id reaction’. This can also appear at the start of the treatment.

What does tinea capitis look like?

The appearance can vary and can look like some non-infective conditions such as alopecia, dandruff, eczema or psoriasis of the scalp.

Infected areas often show hair loss and sometimes small black dots, due to hair that has broken off. Some areas may appear as scaly, red patches resembling dandruff and pustules with yellowish heads may be seen.

In severe cases there may be deep boggy abscesses filled with pus and topped with matted hair called ‘kerion’.

Occasionally, chronic untreated infection can lead to scarring with permanent hair loss.

How is tinea capitis diagnosed?

Tinea capitis is suspected if there is a combination of scaliness and bald patches, especially in children.

The diagnosis can be confirmed by sending scales or hairs from the affected areas for testing; but the results can take up to 6 weeks.

In severe cases or in the presence of a boggy pus-filled swelling, immediate treatment may be started by your doctor.
Can tinea capitis be cured?

Yes it can be cured if treated adequately as it is an infection; however, in order to prevent re-infection other family members and close contacts may need to be checked to make sure they are not carrying the infection.

How can tinea capitis be managed?

There are several ways your doctor may try to manage the condition:

**Topical treatments (applied directly to the scalp)**

A medicated shampoo, such as one that contains ketoconazole, selenium sulphide or zinc pyrithione, may slow or stop the spread of infection; however, the shampoo is unlikely to fully treat the infection. Sometimes anti-fungal ointments or creams may also be advised.

**Oral tablets (medications taken by mouth)**

Although it is reasonable to start treatment straight away if your doctor has a strong suspicion that this is tinea capitis, they may wait for the results of the culture to know the type of species involved to target the correct antifungal dose and duration of the treatment. If the initial drug is not the most appropriate then they may start you on one medication and change it once the results are available.

The oral treatment prescribed will depend on the type of tinea that is diagnosed either by the test taken or tailored to cover the type that is common in your area.

The drugs commonly used by mouth for tinea capitis are:

- Griseofulvin (especially in children)
- Itraconazole
- Terbinafine
- Fluconazole

**Additional Measures**

It is advisable for parents of classmates and other playmates to be informed so their children may be examined and treated if necessary. Children receiving appropriate treatment should be allowed to attend school or nursery.
In order to prevent re-infection, other family members and pets should be examined for signs of infection.

**Self care (What can I do?)**

Avoid sharing combs, hairbrushes, hats, towels, pillowcases, or helmets with other people. Spores of fungi can remain live in combs and hairbrushes, therefore using a disinfectant such as 2% aqueous solution of sodium hypochlorite that contains 16.5% salt will be useful to get rid of them.

Keep the scalp clean. A medicated shampoo, such as one that contains ketoconazole or selenium sulfide should be used regularly.

**Where can I get more information about tinea capitis?**

**References:**

British Association of Dermatologists’ guidelines for the management of tinea capitis 2014 (in press)

**Web links to further information:**

http://www.emedicinehealth.com/ringworm_on_scalp/article_em.htm
http://www.nhs.uk/Conditions/Ringworm/Pages/Introduction.aspx
http://dermnetnz.org/fungal/tinea-capitis.html

For details of source materials use please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: its contents, however, may occasionally differ from the advice given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists’ Patient Information Lay Review Panel