

Ringworm of the Scalp (Tinea Capitis)

Ringworm is infection with certain types of fungi called dermatophytes. The name comes from the distinct, circle-shaped rash formed when the infection involves the skin. When ringworm infects the scalp and hair, it can look several different ways. The scalp can look scaly (like dandruff) and have bald spots or sores. Treatment with antifungal medications is effective. If bald patches are present, the hair will usually grow back once the infection is eliminated.

What is ringworm of the scalp?

Ringworm of the scalp is a common infection caused by certain fungi called dermatophytes. Ringworm of the scalp is also called “tinea capitis.” Dermatophytes also cause infections of the feet (athlete’s foot) or groin (jock itch). Ringworm of the scalp is most common in young children, especially African Americans but can occur in any age group.

The fungus most commonly spreads from person to person. It can also spread from objects on which there are infected hair or skin cells—for example, pillows, combs, hats, or barber’s tools (if not cleaned properly). In some cases, the fungi causing ringworm can be spread by animals, like dogs and cats.

What does it look like?

Typically, ringworm starts as a patchy rash on the scalp. However, the infection may appear in several different ways:

- The scalp may have scales that look like dandruff. There may be scaly patches throughout the scalp, with or without hair loss.
- A typical round, ringlike scaly patch may be present.
- There may be sores with crusting or pustules (pimples).
- Bald spots with little black dots may appear. The black dots are hairs broken off at the follicle (root).
- In more severe cases, red, tender, swollen areas that look like an abscess (*kerion*) may appear.

What are some possible complications of ringworm of the scalp?

Serious complications are rare. With severe infection, permanent hair loss is possible.

Can ringworm of the scalp be prevented?

There are some things you can do to help prevent ringworm of the scalp. However, the infection is difficult to prevent because it is easily passed from person to person—for example, children playing together. (See under “How is ringworm of the scalp treated?”)

Family members and other people with whom your child has been in contact should be checked for infection. Other family members, including adults, can carry the infection without having any symptoms. They can be treated with medicated shampoo, as described later.

How is ringworm of the scalp diagnosed?

- The doctor often suspects the diagnosis from the appearance of the rash on the scalp. However, it may be confused with other conditions, such as dandruff.
- Tests can be done to make the diagnosis for sure—usually by culture of the fungus. The doctor will obtain a sample of the scale and hair from your child’s scalp. This procedure is not painful—a toothbrush is often used. It takes a few weeks to get the results.
- Sometimes the doctor will look at a sample of scale and hair under the microscope to see if fungus is present. However, the fungus is not found as often this way.

How is ringworm of the scalp treated?

It is important to check for infection in family members and other people your child has been in contact with, especially other children. If infected, these contacts will also need to be treated. 

Oral antifungal medication can be used to kill the fungus causing the infection. The most commonly used medication is griseofulvin.

- Treatment usually lasts for 6 to 8 weeks. Give this medication with milk or with a meal containing some fats.
- Griseofulvin is generally a very safe drug. Newer oral antifungal medications are available but are not yet used widely. When more is known about their safety and effectiveness, they may be used more often because they can shorten treatment time.
- The doctor may want to check your child’s scalp to be sure the infection is gone before stopping oral antifungal medications.

Antifungal shampoos are used along with oral medications. These shampoos can help remove scale from the scalp and may help prevent spreading the infection to others. However, they are not as important as the oral medications and are not very effective treatment on their own.

- Some of these products contain selenium sulfide (for example, Selsun Blue) or zinc pyrithione (for example, Head & Shoulders).
- Most experts recommend antifungal shampoos for family members of an infected patient. This is because family members may be “carriers”—they have the fungus on their scalps, but no symptoms of the infection. Treatment

with shampoos can kill the fungus and possibly reduce or prevent the spread of infection.



When should I call your office?

Call our office if:

- Your child’s scalp rash isn’t eliminated after treatment.
- Scaling and other problems return.
- Other children who may have ringworm of the scalp, or who have some type of rash or other symptoms—on the scalp or elsewhere on the body—should be seen by the doctor.