

# RINGWORM OF THE SCALP (TINEA CAPITIS)

## DEFINITION

## DIAGNOSTIC FINDINGS

- Round patches of hair loss that slowly increase in size
- A black-dot, stubbed appearance of the scalp from hair shafts that are broken off at the surface
- The scalp may have scaling
- Mild itching of the scalp
- Ringworm of the face may also be present
- Usually occurs in children age 2 to 10 years
- This diagnosis requires a positive microscope test (KOH prep) or fungus culture

## CAUSE

A fungus infects the hairs and causes them to break. Ringworm is not caused by a worm. Over 90% of cases are due to *T. tonsurans*, which is transmitted from other children who are infected. Combs, brushes, hats, barrettes, seatbacks, pillows, and bath towels can transmit the fungus. Less than 10% of the cases are caused by infected animals. The animal type causes more scalp irritation, redness, and scaling. If the child has the animal type of fungus, he is not contagious to other children.

## EXPECTED COURSE

Ringworm of the scalp is not dangerous. Without treatment, however, the hair loss and scaling may spread to other parts of the scalp. Some children develop a kerion, which is boggy, tender swelling of the scalp that can drain pus. Kerions are an allergic reaction to the fungus and require additional treatment but will take 6 to 12 months. In the meantime, the child can wear a hat or scarf to hide the bald areas.

## TREATMENT

**Oral Antifungal Medicine.** The main treatment for ringworm of the scalp is griseofulvin taken orally for 8 weeks. (The product comes in a 125 mg per 5 ml suspension and 250 mg capsules.) Griseofulvin is best absorbed if taken with fatty foods such as milk or ice cream. Antifungal creams or ointments are not effective in killing the fungus that causes ringworm of the scalp.

**Antifungal Shampoo.** The use of an antifungal shampoo makes the child less contagious and allows him to return to child care or school. Purchase a nonprescription shampoo containing selenium sulfide (for example, Selsun) Lather up and leave it on for 10 minutes before rinsing. Use the antifungal shampoo twice a week for the next 8 weeks. On other days, use a regular shampoo.

**Contagiousness.** Ringworm is mildly contagious. In the days before antifungal medications, about 5% of school contacts usually became infected. However, 25% of siblings (close contact) developed ringworm. Once the child has been started on griseofulvin and received one washing with the special shampoo, he can return to school.

**Common Mistakes.** It is psychologically harmful and unnecessary to shave the hair, give a close haircut, or to force the child to wear a protective skull cap.

**Follow-up Appointment.** In 6 weeks the child should return to his doctor for lab tests of their hair to be certain they have achieved a cure. If not, the griseofulvin will need to be given for longer than 8 weeks.

## CONTACT YOUR SCHOOL NURSE DURING SCHOOL HOURS IF:

- The ringworm becomes infected with pus or a yellow crust.
- The scalp becomes swollen or boggy.
- The ringworm continues to spread after 2 weeks of treatment
- You have questions or concerns.