



## Tinea Capitis

Tinea capitis is the medical term for a fungal infection (“Ringworm”) of the scalp. It is caused by a fungus, not a worm, and is an amazingly contagious problem frequently brought home by school age every fall. Tinea capitis has the potential to cause significant problems. Interestingly enough, it is limited to children. Sebum, the skin oil stimulated by teenage hormones, has a negative impact on the ability of fungi to penetrate the hair shaft, thus preventing tinea capitis infection in teenagers and adults.

### Symptoms:

Children may initially experience patchy scaling of the scalp, progressing into widespread scaling and crusting. This is often misinterpreted by parents as dandruff. Children do not have dandruff, however. They may certainly have psoriasis of the scalp (a problem often misdiagnosed as tinea capitis until it repeatedly fails antifungal therapy). Accompanying symptoms of itching, hair loss, “pus bumps” (pustules) or scaling patches on the body. A more advanced problem known as a kerion often brings children into the doctor’s office. Kerions are large, round, oozing and crusting formations due to the fungal infection. If caught early, and before too much inflammation can cause scar formation, associated hair loss will usually regrow.

### Treatment:

Tinea capitis can result from a number of different fungi, but they are all treated with oral (by mouth) medication. Topical antifungal products and shampoos can’t penetrate the hair shaft where the majority of the fungus resides. It used to take 4-6 weeks of treatment with Grifulvin V syrup for complete resolution, however, some fungi have become resistant to therapy. It is not uncommon to see treatment last 3 months, or even as long as 6 months. Therapy is initially based upon the child’s weight and, if there is no improvement within 4-6 weeks, the dosage is then raised. Grifulvin V syrup can most commonly cause nausea and vomiting (usually improved by lowering the dose and taking on a full stomach). It can also cause headaches and increased sun sensitivity. While it may cause liver or blood count changes, fortunately these changes are very unlikely.

The use of anti-fungal shampoos such as over-the-counter **Nizoral A-D Shampoo** can provide some relief from itching and decrease spread to other people, but it is not capable of penetrating the hair and curing the fungal infection by itself. The prescription form of this product, **Nizoral Shampoo 2%** has similar properties.

One trick for improving the appearance and comfort of the scalp: apply **Johnson & Johnson Baby Oil** to the thickened scaling areas for at least 15 minutes prior to shampooing can help loosen the scale on trouble zones.

Encourage your children not to share hats, combs, and brushes with their friends or family members. This is a very common way to spread the infection. Periodically disinfect the hair combs and brushes anyway. You never know when they were shared. Diluted Ammonia or liquid bleach solution can be used. Make sure the combs and brushes are well rinsed so that the chemicals do not come in contact with the skin. Two other sources of fungus are children playing with their friend’s hair or they may pick up the fungus from infected kittens.

Have patients. Tinea capitis may, unfortunately, drag on far longer than you anticipated but, at least it’s treatable.