# Tinea capitis in children: Diagnosis, treatment, and prevention.

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## Introduction

Tinea capitis, also known as scalp ringworm, is a fungal infection of the scalp that primarily affects children, although it can occur at any age. The condition is caused by dermatophytes, a group of fungi that thrive in the outer layers of the skin, hair, and nails [1].

Tinea capitis is highly contagious and typically spreads through direct contact with an infected person or by sharing contaminated items, such as combs, hats, or towels. While the infection is treatable, timely diagnosis and effective management are essential to prevent complications and avoid the spread of the infection [2].

Tinea capitis is a superficial fungal infection that primarily targets the hair follicles and the scalp. It is most common in children aged 3 to 14, and it is relatively rare in adults. The infection is characterized by the development of round, scaly patches on the scalp, often with hair loss and sometimes a red, inflamed border. In more severe cases, a condition called kerion may develop, which involves a painful, pus-filled area that can lead to permanent scarring if not treated appropriately [3].

Tinea capitis is caused by various species of dermatophytes, with *Trichophyton tonsurans* being the most common causative agent in the United States. Other fungi, such as *Microsporum canis*, may also be responsible for the infection, particularly in cases where the infection is contracted from animals, such as cats or dogs [4].

Diagnosing tinea capitis is primarily based on clinical examination, though laboratory tests are often required for confirmation. A dermatologist will examine the affected areas of the scalp and look for characteristic signs such as round patches with hair loss and scaling [5].

Treating tinea capitis requires a combination of antifungal medications and proper scalp care. Unlike other superficial fungal infections, tinea capitis cannot be treated effectively with topical antifungals alone due to the involvement of the hair follicles. Systemic antifungal treatment is usually necessary to fully eradicate the infection [6].

If a child exhibits symptoms of tinea capitis, it is important to seek medical attention for a proper diagnosis and treatment plan. Left untreated, the infection can spread to other parts of the body, cause permanent hair loss, or lead to more serious complications, such as a secondary bacterial infection or kerion. Additionally, if the infection does not respond to initial treatment or if there are signs of a severe reaction, it is crucial to follow up with a healthcare provider [7].

Parents should be vigilant in observing the symptoms of this infection and seek medical care promptly to avoid complications. By promoting good hygiene, avoiding shared personal items, and ensuring that children complete their treatment regimens, the spread of tinea capitis can be controlled, allowing children to recover fully and resume their daily activities without lasting effects [8].

Tinea capitis is a superficial fungal infection that affects the scalp, causing symptoms such as hair loss, scaling, and redness. It typically appears as round patches on the scalp where the hair is broken or missing. The infection can also lead to irritation, itching, and in some cases, painful swelling. Tinea capitis is caused by dermatophytes, including species like Trichophyton tonsurans and Microsporum canis. It is most common in children between the ages of 3 and 14, though adults can also be affected, particularly if they are exposed to infected children or animals [9].

Diagnosing tinea capitis typically involves a physical examination, during which the doctor will assess the appearance of the scalp and hair. However, since other skin conditions can resemble tinea capitis, additional diagnostic tests are often necessary [10].

### Conclusion

Tinea capitis is a common and highly contagious fungal infection in children that can lead to significant discomfort and social challenges if left untreated. However, with early diagnosis, effective treatment with oral antifungals, and appropriate preventive measures, it can be managed successfully.

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