

Chapter 53

Kerion in Pediatric Age



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A 6-year-old boy was referred to the Dermatology and Venereology with a reddish nodules on the back of the scalp since three weeks. A severe pruritus and the presence of brittle hairs were reported. Moreover, one week ago, a nodules appeared on the left side of the neck.

A physical examination of the scalp showed well-defined erythematous plaques and nodules with multiple pustules and erosions. Moreover, within the skin lesions multiple broken hairs 0.2–0.5 cm long were present (Fig. 53.1).

Based on the case description and the photographs, what is your diagnosis?

Differential Diagnoses

1. Kerion.
2. Furunculosis.
3. Carbuncles.
4. Seborrhoeic dermatitis.

Diagnosis

Kerion.

On Wood's lamp examination, a yellow-green fluorescence was found. A direct mycological examination with 10% potassium hydroxide showed spores outside the hair shaft (ectothrix). In fungal culture, *Microsporum canis* was isolated.

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Fig. 53.1 A six-year-old boy with lesions on the scalp and enlarged lymph nodes

The patient was diagnosed with kerion. He was treated with systemic microsize griseofulvin 400 mg daily for eight weeks and ketoconazole shampoo 2% two to three times a week.

Discussion

Tinea capitis is often found in children, especially at prepubertal age. Most of the cases (93.3%) occurred below 14 years of age. Symptoms of tinea capitis include itching, fever and pain. The pattern of tinea capitis is divided into:

non-inflammatory and inflammatory. Inflammatory tinea capitis is often associated with posterior cervical lymphadenopathy. The lesions may show the kerion form, nodules, broken hair and pustular discharge. The condition can lead to scarring alopecia [1, 2].

In tinea capitis, the source of transmission is an important aspect that needs to be explored. Therefore, it is important to inquire about the history of contact with both humans and animals [3].

A Wood's lamp examination is helpful in diagnosing tinea capitis. A yellow-green fluorescence indicated the presence of *Microsporum canis*. Dermoscopy is a frequently used method for diagnosing pigmented lesions. In recent years many studies have shown the usefulness of dermoscopy in the evaluation of hair and scalp abnormalities including tinea capitis [4].

Griseofulvin is still recommended for the treatment of tinea capitis in patients over four years of age. It is still the drug of choice because of its safety profile and good tolerance in children. The recommended dose of microsize griseofulvin in children is 20–25 mg/kg/day and ultramicrosize griseofulvin 15 mg/kg/day for six to 12 weeks [5].

Key Points

- Tinea capitis is a common dermatophyte infection found mainly in children.
- The diagnosis of tinea capitis is established based on the patient's history, clinical picture, as well as Wood's lamp and dermoscopic examination. Griseofulvin is the first-line treatment for tinea capitis in children.

References

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