Tinea Capitis

1 Introduction

1.1 Purpose

This clinical guideline is to ensure that patients from a refugee background receive appropriate screening and treatment for Tinea Capitis.

2 Clinical Guideline

2.1 Background

Tinea capitis is a dermatophyte (parasitic fungal) infection of the scalp, hair follicles and hair shafts. The majority of those presenting with tinea capitis will be children [1,2,3,4,5,6] and this is a condition that occurs in Australian and refugee populations. A recent study from W.A. found that 9.1% of children referred to refugee health clinic had tinea capitis.[7] There are a number of different dermatophytes that cause tinea capitis worldwide, some anthropophilic and some zoophilic. Distribution of dermatophytes varies across countries and locations[2], however, they are mostly seen in warm, humid environments.[8] There has been a recent change in the epidemiology of these dermatophytes, with increasing incidence evident.[2,8] The immunological state of the host and the causative species of dermatophyte often determine the severity of the disease. [3]
In Central and West Africa, *Trichophyton soudanense, T. Violaceum, T. tonsurans* (anthropophilic dermatophytes) are possible causative organisms. (Fulgence, Abibatou et al. 2013, Coulibaly, Thera et al. 2015) If left untreated it can cause kerion formation (characterised by boggy tender plaques and pustules) and eventually scarring with permanent alopecia. (Ely, Rosenfeld et al. 2014) Severe infection can be associated with cervical and occipital lymphadenopathy , fever and leucocytosis. [5]

This organism has been reported among African immigrants in Europe, North America and Australia and New Zealand.[1,8,10]

2.2 Management

Prior to treatment, it is advisable to take scrapings from the scalp in case response to treatment is poor as it is difficult to get a positive culture once treatment has commenced. It may also be of use in cases with atypical clinical presentations.[3]

If there is a kerion then it should be treated with oral antifungals for at least 4 weeks. It is reasonable to use griseofulvin initially[6] and there is no need to do pretreatment LFTs although many patients will already have this in their routine screening.

2.3 Dosage

- Children 20mg/kg /day once daily
- Adults 500mg once daily.

Griseofulvin is bitter tasting, and patients should be advised to take it with milk or peanut butter to improve absorption.[5,] Parents should be advised about and asked to report symptoms of hepatic toxicity (e.g., abdominal pain, anorexia, nausea, vomiting, jaundice).[5]

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FBC is reasonable to consider if prolonged treatment is expected, but is not normal practice.

It is useful to use topical Lamisil treatment as adjunctive treatment.
Selenium sulfide shampoos used concomitantly for the first two weeks may reduce transmission of infection early in treatment.[5] Shampoo should be applied for 5 to 10 minutes three times a week for two to four weeks.[5] Headwear, pillows, combs and hairbrushes should be considered as possible reservoirs of infection[3,9] and patients advised to clean and avoid sharing them until the completion of 14 days of treatment.[5]

If the kerion appears resistant to initial doses and the treatment has been well tolerated (at review at one month) then it may be necessary to continue treatment for another 2-4 weeks.

During treatment women should be advised to avoid pregnancy with non- hormonal contraception during treatment and for 1 month afterwards.

Men should be advised to avoid fathering a child for six months following treatment as studies show that it causes aneuploidy.

Patients should be followed up when treatment is completed, or sooner if clinically indicated.[5] If the response is still poor then dermatological review is warranted or oral terbinafine may be considered though not on PBS for this.

2.4 Document Review and Approval

Person Name / Committee	Position (if applicable)	Function (Owner | Approve | Review)
Dr Margaret Kay		Document Owner
Dr Clare Nourse	Paediatric Infectious Diseases Consultant, Lady Cilento Children's Hospital	Review
Clinical Advisory Group		Approval

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PHNs gratefully acknowledge the financial and other support from the Australian Government Department of Health.

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