Take Culture to Confirm Pediatric Tinea Capitis

BY GREG MUIRHEAD
Contributing Writer

MAUI, HAWAII — Because tinea capitis in children can be mistaken for a number of other diseases, Dr. Sheila Fallon Friedlander urged physicians, "I want you to culture."

"Classically, people have thought that you look for hair loss and scaling, but my experience has been that most scalps that scale are not tinea capitis," she said at a meeting sponsored by the University Children's Medical Group and the American Academy of Pediatrics.

Although with some presentations tinea capitis can be easy to diagnose, the infection can look unusual and be harder to detect, she said at the meeting, also sponsored by California Chapter 2 of the AAP.

Diseases and conditions that can be mistaken for tinea capitis include seborrheic dermatitis, eczema, psoriasis, alopecia areata, cradle cap, traction folliculitis leading to traction alopecia, and the effects of head lice.

In their study, Dr. Friedlander and a colleague examined 200 children, with half in her organization's clinic and half in other pediatric practices in San Diego. "What we found is a heck of a lot of kids have scale on their scalp," she said. "And a heck of a lot of kids—if you look for it—have [enlarged] lymph nodes in their neck." Based on these two symptoms plus hair loss, many pediatricians have been trained to diagnose tinea capitis, said Dr. Friedlander, director of the fellowship training program in pediatric and adolescent dermatology at Rady Children's Hospital, San Diego.

"But that's inaccurate," she said. "That's not appropriate. In our study, we found that 22% of kids just walking into the pediatrician's office had scale, and 55% of them had [enlarged] lymph nodes. Very few of those kids had tinea capitis" (Pediatrics 2005;115:e1-6). She encouraged checking the lymph nodes, however. "If a child comes in who has scaling and has hair loss and has large lymph nodes, then you are very likely to be dealing with tinea capitis." But the child needs to be cultured to confirm the diagnosis.

Dr. Friedlander said her center has done a study that supports taking cultures with a cotton swab and transport medium otherwise used for strep throat. She instructed the audience to swab all four quadrants of the patient's scalp and send it out to a lab. Even if the sample swab sits at room temperature in the office for a couple of days before delivery to the lab, the results still should be good.

"Ninety-five percent of tinea capitis in this country is caused by *Trichophyton tonsurans,*" she said, which is believed to have come from Central and South America. Tinea capitis is the most common dermatophyte infection in children, frequently affecting those who are aged 3-7 years. "It commonly affects the preschool age group."

"The prevalence is somewhere between 0% and 8% in any given place, depending on the city you're looking at," she said, and it's even higher in some urban populations and among African Americans. Prevalence appears to be relatively higher in immigrants from Africa.

While taking the history, Dr. Friedlander continued, also ask about family members, "because often there will be somebody else in the house who is scaling."

As for treatment, a meta-analysis of six studies found that a 2- to 4-week course of terbinafine is "at least as effective" as a 6- to 8-week course of griseofulvin for *Trichophyton*. But for *Microsporum* infections, griseofulvin is likely the better treatment (Pediatrics 2004;114:1312-5).

"High-dose griseofulvin, for the moment, is the drug of choice; it's FDA approved," she said. It should be given with food to aid absorption. Keep in mind that children clear the drug faster than do adults and, therefore, need a high dose. Patients should be rechecked in 4 weeks. Most of Dr. Friedlander's patients are treated for 8 weeks. Lab tests are not needed if patients use the drug for 8 weeks or less.

"Consider off-label use of terbinafine if there is griseofulvin failure," she said.

As an aid to therapy, the use of antifungal lotions and shampoos help decrease the time of infectivity, Dr. Friedlander said.

She has her patients use Nizoral shampoo twice a week. Selenium sulfite is another option.

Dr. Friedlander disclosed that she is a speaker on the speakers bureau, a consultant, and/or involved with clinical research trials for Novartis AG, Pfizer Inc., and Dermik Laboratories. ■