

4. Tinea or pityriasis amiantacea

Tinea amiantacea is characterized by scaling of the scalp and temporary alopecia (occasionally scarring alopecia). The scaling is thick and "asbestos-like," and binds down tufts of hair.¹ This clinical entity represents a particular reaction pattern of the scalp to various inflammatory scalp diseases. Biopsy of the affected scalp commonly yields pathological diagnoses of scalp psoriasis, seborrheic dermatitis or eczema, or tinea capitis (most commonly due to the yeast of the *Trichophyton* genus).²

Scalp psoriasis has a variable clinical appearance. The entire scalp can be involved but other times it is restricted to only a few sharply demarcated plaques. The lesions might advance over the edge of the hairline onto the facial skin. Sometimes the scales covering the lesions can have an asbestos-like appearance,³ which would differ from the typical salmon-coloured plaques with silvery scales commonly seen with psoriasis involving other areas of the skin. As psoriasis has a familial component, the fact that this patient's sibling has psoriasis might lead physicians to investigate this as the cause of his symptoms.

Seborrheic dermatitis affects the scalp, central face, and anterior chest. Several factors have been associated with seborrhea that could play a role in its etiology, including hormone levels, fungal infections, nutritional deficits, and neurogenic factors. There might be a link between seborrheic dermatitis and the proliferation of the *Malassezia* species of yeast in the affected areas.⁴ In infants, seborrheic dermatitis might present as thick, greasy scales on the vertex of the scalp (ie, cradle cap).⁵ The condition is not pruritic in infants as with older children and adults. The scales can vary in colour, appearing white, off-white, or yellow. In adolescents and adults it often presents as scalp scaling, ie, dandruff. Along with the scalp signs, seborrheic dermatitis might also cause mild to marked reddening of the nasolabial fold, often with greasy scaling.⁴

Tinea capitis is a fungal infection of the skin and hair with involvement of the hair shaft and the pilosebaceous unit. Tinea capitis can manifest in multiple ways, depending on if there is inflammation. If it is noninflammatory, multiple patches of irregularly shaped alopecia can be seen. Conversely, there might also be some fine scaling and little to no alopecia, which makes it difficult clinically to distinguish from seborrheic dermatitis of the scalp without doing fungal scrapings.⁶

The clinical picture in this case is not typical of impetigo. Impetigo is a highly contagious infection of the superficial epidermis; it is most common in young children but can affect any age group. It is spread through direct contact, and incidence is increased during the summer months. The most common pathogen is *Staphylococcus aureus*. Nonbullous impetigo presents as a single red macule or papule that quickly becomes a vesicle. The vesicle is easily ruptured and forms the characteristic "honey

crusts," which can be pruritic.⁷ Treatment consists of an antistaphylococcal topical (if localized) or oral antibiotic for both the bullous and nonbullous forms of the disease.⁸

Treatment

Treatment depends on underlying etiology. In cases such as this one, biopsy is seldom performed owing to the patient's age; however, biopsy can occasionally be beneficial in determining etiology and more precise treatment.

If scalp psoriasis is suspected, midpotency topical steroids, such as betamethasone valerate lotion or mometasone furoate lotion, should be tried. If the response is insufficient, high-potency corticosteroids, such as clobetasol propionate, in either shampoo or lotion vehicle should be considered.^{9,10} Tar shampoos, salicylic acid-containing shampoos, and vitamin D analogs can also be used, often as an adjunct to topical corticosteroids.¹¹

If scalp seborrhea is suspected, a 2-week course of ketoconazole 2% shampoo, ciclopirox olamine shampoo, or ciclopirox olamine lotion should be effective.^{12,13} Ketoconazole has been shown to be safe for treatment of infantile seborrheic dermatitis (cradle cap).¹⁴ A combined regimen of ketoconazole 2% shampoo and a 6-week course of terbinafine has also proven effective. Anti-inflammatory agents, such as topical steroid shampoos, are also first-line therapeutic options.¹⁵

There has been evidence of staphylococci on the scalp contributing to the pathogenesis and producing the clinical entity of tinea amiantacea; therefore, antibiotic treatment is occasionally employed.²

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Competing interests

None declared

References

1. Moon CM, Schissel DJ. Pityriasis amiantacea. *Cutis* 1999;63(3):169-70.
2. Abdel-Hamid IA, Agha SA, Moustafa YM, El-Labban AM. Pityriasis amiantacea: a clinical and etiopathologic study of 85 patients. *Int J Dermatol* 2003;42(4):260-4.
3. Van de Kerkhof PC, de Hoop D, de Korte J, Kuipers MV. Scalp psoriasis, clinical presentations and therapeutic management. *Dermatology* 1998;197(4):326-34. Erratum in: *Dermatology* 1999;198(2):222.
4. Schwartz RA, Janusz CA, Janniger C. Seborrheic dermatitis: an overview. *Am Fam Physician* 2006;74(1):125-30.
5. Janniger CK. Infantile seborrheic dermatitis: an approach to cradle cap. *Cutis* 1993;51(4):233-5.
6. Gupta AK, Hofstadter SL, Adam P, Summerbell RC. Tinea capitis: an overview with emphasis on management. *Pediatr Dermatol* 1999;16(3):171-89.
7. Cole C, Gazewood J. Diagnosis and treatment of impetigo. *Am Fam Physician* 2007;75(6):859-64.
8. Hirschmann JV. Antimicrobial therapy for skin infections. *Cutis* 2007;79(6 Suppl):26-36.
9. Griffiths CE, Finlay AY, Fleming CJ, Barker JN, Mizzi F, Arsonnaud S. A randomized, investigator-masked clinical evaluation of the efficacy and safety of clobetasol propionate 0.05% shampoo and tar blend 1% shampoo in the treatment of moderate to severe scalp psoriasis. *J Dermatol Treat* 2006;17(2):90-5.
10. Mazzotta A, Esposito M, Carboni I, Schipani C, Chimenti S. Clobetasol propionate foam 0.05% as a novel topical formulation for plaque-type and scalp psoriasis. *J Dermatol Treat* 2007;18(2):84-7.
11. Graham-Brown R, Bourke J. *Mosby's color atlas and text of dermatology*. London, UK: Elsevier Ltd; 1998. p. 181-2.
12. Swinyer LJ, Decroix J, Langner A, Quiring JN, Blockhuys S. Ketoconazole gel 2% in the treatment of moderate to severe seborrheic dermatitis. *Cutis* 2007;79(6):475-82.
13. Piérard-Franchimont C, Piérard GE, Arrese JE, De Doncker P. Effect of ketoconazole 1% and 2% shampoos on severe dandruff and seborrheic dermatitis: clinical, squamometric and mycological assessment. *Dermatology* 2001;202(2):171-6.
14. Sheffield RC, Crawford P, Wright ST, King VJ. Clinical inquiries. What's the best treatment for cradle cap? *J Fam Pract* 2007;56(3):232-3.
15. Squire RA, Goode K. A randomised, single-blind, single-centre clinical trial to evaluate comparative clinical efficacy of shampoos containing ciclopirox olamine (1.5%) and salicylic acid (3%), or ketoconazole (2%, Nizoral) for the treatment of dandruff/seborrheic dermatitis. *J Dermatol Treat* 2002;13(2):51-60.