Diseases of the Scalp

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Afro-ethnic hair is different from Caucasian and Asian hair and has unique features. The scalp and the hair of African American patients are more prone to certain conditions, and scalp disorders are among the most common dermatologic complaints.

8.1

Acne Keloidalis

Acne keloidalis nuchae (AKN), or folliculitis keloidalis nuchae, is a chronic inflammatory disease in which keloid-like papules, plaques, and pustules occur at the nape of the neck and on the occipital scalp. Scarring occurs secondary to inflammation of the hair follicle and fibrosis of the tissue. The condition is disfiguring and sometimes painful. The condition is idiopathic but is often associated with friction from clothing or helmets, trauma from shaving, chronic bacterial infection, or an autoimmune process. Those affected usually have thick, coarse, curly hair.

8.1.1 Presentation in Black Skin

Acne keloidalis is seen mostly in men of African descent (Figs. 8.1–8.7). The term is used even though the condition is not a keloid. The affected individuals do not have a tendency to develop keloids in other areas of the body.

8.1.2 Management

Topical and intralesional steroids are used, in addition to not shaving.



Fig. 8.1 Acne keloidalis nuchae (AKN)

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Fig. 8.2 AKN Fig. 8.4



Fig. 8.3 AKN



Fig. 8.5 AKN



Fig. 8.6 AKN

Fig. 8.7 Keloid secondary to injury, mimicking AKN

8.2 Seborrheic Dermatitis

Seborrheic dermatitis is a common inflammatory papulosquamous condition that affects the sebum-rich areas of the body, including the face, scalp, neck, upper chest, and back. The pathogenesis may be related to an abnormal immune response to *Pityrosporum* (*Malassezia*) yeast.

Clinical presentations of seborrheic dermatitis are widely varied, ranging from simple "dandruff" to fulminant rash. There is often pruritus, erythema, and greasy scaling in characteristic sites, such as the scalp, face, the beard area, upper chest, ears, eyelid margins (blepharitis), and intertriginous areas.

8.2.1 Presentation in Black Skin

Incidence varies between different ethnic groups: in a study in the United States and China, seborrheic dermatitis prevalence was 81–95% in African Americans versus 66–82% in Caucasians. In persons with darker skin, the involved areas may be hypopigmented or hyperpigmented (Figs. 8.8–8.13), and these pigmentary changes may persist after treatment.



Fig. 8.8 Seborrheic dermatitis

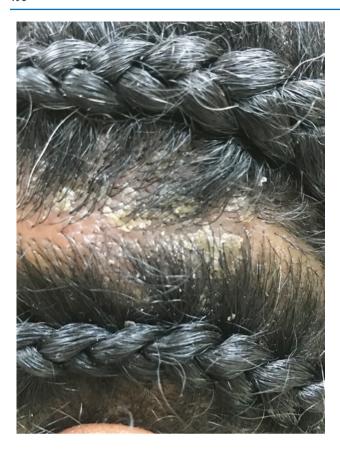


Fig. 8.9 Seborrheic dermatitis

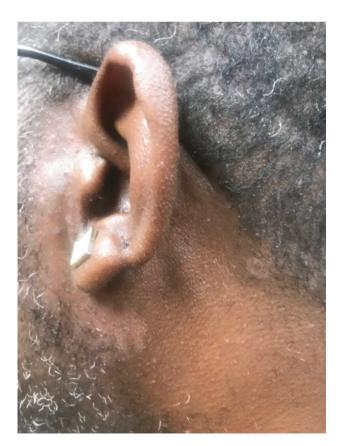


Fig. 8.10 Seborrheic dermatitis



Fig. 8.11 Seborrheic dermatitis



Fig. 8.12 Seborrheic dermatitis

8.2.2 Management

It should be emphasized to patients that there is no cure for seborrheic dermatitis; the condition intermittently waxes and wanes. Treatment includes shampoos (salicylic acid, selenium sulfide, tar shampoos, ketoconazole), topical steroids, and imidazole creams (ketoconazole/clotrimazole cream).



Fig. 8.13 Seborrheic dermatitis



Psoriasis is a chronic, intermittently relapsing inflammatory disease characterized by sharply demarcated erythematous, silvery, scaly plaques most often seen on the scalp or anywhere else on the body, including the nails. Psoriasis affects about 2% of the world's population and can develop at any age. Psoriatic arthritis is more common among individuals with nail and scalp psoriasis.

Psoriasis has been found to be associated with several other chronic diseases and/or medications. Psoriatic patients with severe disease have an increased relative risk for cardio-vascular disease, including cerebrovascular accidents, pulmonary emboli, and myocardial infarctions.

8.3.1 Presentation in Black Skin

Psoriasis in darker skin types can present diagnostic challenges, as features overlap with those of other papulosquamous disorders, and erythema is less conspicuous (Figs. 8.14–8.18). Variations in clinical presentation and quality-of-life impact of psoriasis may contribute to nuances in the approach to treatment in patients with skin of color. When involvement includes the scalp, anecdotal clinical experience suggests that the severity tends to be increased in



Fig. 8.14 Psoriasis



Fig. 8.15 Psoriasis

women of African ancestry, probably because of less frequent hair washing in women with naturally Afro-textured hair.

8.3.2 Management

Localized disease may be treated with topical agents (topical steroids, vitamin D analogs, topical retinoid therapy, tar-based therapy). For widespread involvement, consider



Fig. 8.16 Psoriasis



Fig. 8.17 Psoriasis



Fig. 8.18 Psoriasis

ultraviolet light (ineffective for scalp psoriasis), systemic therapy, or excimer laser.

8.4 Poliosis

Poliosis describes a circumscribed patch or patches of grey or white hair. Poliosis may occur in a number of syndromes, including Waardenburg syndrome and piebaldism. Poliosis may also be seen in association with regressing melanoma, vitiligo, halo nevi, and in alopecia areata when new hairs grow. Poliosis may also be seen in association with a number of drugs, including chloroquine and cyclosporine.

8.4.1 Presentation in Black Skin

Poliosis is more obvious in African Americans because the hair is usually dark (Figs. 8.19 and 8.20).

8.4.2 Management

Poliosis is a benign condition, so treatment is not necessary.



Fig. 8.19 Poliosis



Fig. 8.20 Poliosis

8.5 Dissecting Cellulitis of the Scalp

Dissecting cellulitis of the scalp, also known as *perifolliculitis capitis abscedens et suffodiens* (PCAS), is an abnormal reaction to staphylococcal antigens. On biopsy, it appears as a neutrophilic scarring alopecia.

8.5.1 Presentation in Black Skin

This condition rarely affects non-black skin. It is less common in women and children. The disease appears as small pustules all over the scalp, with boggy nodules (Figs. 8.21–8.32). It can cause sinus tracts and hypertrophic scarring with alopecia.

8.5.2 Management

Dissecting cellulitis of the scalp is hard to treat. In our clinic, the first-line treatment is the use of oral antibiotics, specifically amoxicillin with clavulanic acid, followed by minocycline as maintenance. Many other antibiotics and some immunosuppressants have been tried. The use of intralesional corticosteroids, especially triamcinolone at higher concentration, seems to decrease scar formation.



Fig. 8.21 Dissecting cellulitis of the scalp



Fig. 8.22 Dissecting cellulitis of the scalp



Fig. 8.23 Dissecting cellulitis of the scalp, pretreatment



Fig. 8.24 Dissecting cellulitis of the scalp with Tinea capatis pretreatment, with anti fugal and antibiotics



Fig. 8.25 Dissecting cellulitis of the scalp with Tinea capatis pretreatment, with anti fugal and antibiotics



 $\begin{tabular}{ll} \textbf{Fig. 8.26} & \textbf{Dissecting cellulitis of the scalp with Tinea capatis pretreatment, with anti fugal and antibiotics} \end{tabular}$



Fig. 8.28 Dissecting cellulitis of the scalp, posttreatment



Fig. 8.27 Dissecting cellulitis of the scalp, posttreatment

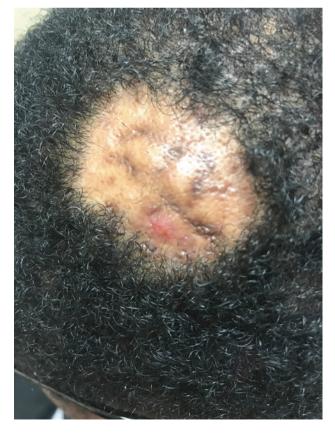


Fig. 8.29 Dissecting cellulitis of the scalp



Fig. 8.30 Dissecting cellulitis of the scalp



Fig. 8.31 Dissecting cellulitis of the scalp



Fig. 8.32 End-stage dissecting cellulitis of the scalp with keloid formation

8.6 Folliculitis Decalvans

Like dissecting cellulitis, folliculitis decalvans is a common form of infectious scarring alopecia. *Staphylococcus aureus* is often isolated from the pustules. On physical exam, one can see perifollicular pustules and alopecia plaques with absence of hair follicles. There may be some tufting of the hair.

8.6.1 Presentation in Black Skin

This condition favors black skin and is commonly seen in African Americans, but other races are also affected (Figs. 8.33–8.39).

8.6.2 Management

The treatment of this condition includes anti-staph antibiotics, intralesional triamcinolone, and topical antibiotics and steroids. If the alopecia is local and small, excision of the alopecia area or hair transplantation may improve the appearance of the scalp.



Fig. 8.35 Folliculitis decalvans

Fig. 8.33 Folliculitis decalvans



Fig. 8.34 Folliculitis decalvans



Fig. 8.36 Folliculitis decalvans



Fig. 8.37 Folliculitis decalvans



Fig. 8.38 Folliculitis decalvans



Fig. 8.39 Folliculitis decalvans

Suggested Reading

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