Treatment of Seborrheic Dermatitis in Black Patients

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PRACTICE **POINTS**

- Cultural awareness when treating Black patients with seborrheic dermatitis is vital to providing appropriate care, as hair care practices may impact treatment options and regimen.
- Knowledge about over-the-counter products that are targeted toward Black patients and the ingredients they contain can assist in providing better counseling to patients and improve shared decision-making.

Seborrheic dermatitis (SD) is a common diagnosis in Black patients who seek care from a dermatologist; therefore it is important to have effective treatment approaches for SD in this patient population. In this study, we aimed to evaluate treatment options for SD in Black patients identified on consumer websites and in the medical literature. PubMed and Google searches were conducted to identify medical and nonmedical products and ingredients that commonly are used by Black patients to manage symptoms of SD. Our results indicated that there are many nuances to consider when treating Black patients with SD to prevent health disparities and provide culturally sensitive care.

Seborrheic dermatitis (SD) is a common chronic inflammatory skin condition that predominantly affects areas with high concentrations of sebaceous glands such as the scalp and face. Up to 5% of the worldwide population is affected by SD each year, causing a major burden of disease for patients and the health care system.[1] In 2023, the cost of medical treatment for SD in the United States was $300 million, with outpatient office visits alone costing $58 million and prescription drugs costing $109 million. Indirect costs of disease (eg, lost workdays) account for another $51 million.[1] Since SD frequently manifests on the face, it tends to have negative effects on the patient's quality of life, resulting in psychological distress and low self-esteem.[2]

Patients with SD may describe symptoms of excessive dandruff and itching along with hyperpigmentation or hypopigmentation of the skin; Black patients tend to present with the classic manifestations: a combination of scaling, flaking, and erythematous patches on the scalp, ears, and face, particularly around the eyebrows, eyelids, and nose. With SD being the second most common diagnosis in Black patients who seek care from a dermatologist, it is important to have effective treatment approaches for SD in this patient population.[3]

In this study, we aimed to evaluate medical and nonmedical treatment options for SD in Black patients by identifying common practices and products mentioned on consumer websites and in the medical literature.

Methods

A Google search was conducted during 2 time periods (September 2022–October 2022 and March 2023–April 2023) using the terms *products for itchy scalp in Black patients*, *products for dandruff in Black patients*, *itchy scalp in Black women*, *itchy scalp in Black men*, *treatment for scalp itch in Black patients*, and *dry scalp in Black hair*. Products that were recommended by at least 1 website on the first page of search results were included in our list of products, and the ingredients were reviewed by the authors. We excluded individual retailer websites as well as those that did not provide specific recommendations on products or ingredients to use when treating SD. To ensure reliability and standardization, we did not review products that were suggested by ads in the shopping section on the first page of search results.

We also evaluated medical treatments used for SD in dermatology literature. A PubMed search of articles

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The eTables can be found in the Appendix online at www.mdedge.com/dermatology.

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indexed for MEDLINE using the terms *seborrheic dermatitis treatment for Black patients*, *treatment for dandruff for Black patients*, and *seborrheic dermatitis and skin of color* was conducted. We excluded articles that did not address treatment options for SD, were specific to treating SD in patient populations with specific comorbidities being studied, discussed SD in animals, or were published prior to 1990.

Results

We identified 16 unique consumer websites with product or ingredient recommendations for SD in Black patients, none of which were provided by authors with a medical or scientific background; however, 4 (25%) websites included insights from board-certified dermatologists. A total of 16 ingredients were recommended, 15 (94%) of which were mentioned at least twice in our search results (eTable 1).

Overall, we noticed that ingredients labeled as natural or organic were common in over-the-counter (OTC) products, and ingredients such as sulfates and parabens were avoided. Common OTC ingredients for antidandruff and anti-itch shampoos and conditioners include zinc pyrithione, selenium sulfide, coal tar, salicylic acid, and citric acid. Additionally, coconut oil, tea tree oil, apple cider vinegar, and charcoal are common natural alternatives used to address SD symptoms.

Our review of the literature yielded limited recommendations tailored specifically to Black patients with SD. Of 108 abstracts, articles, or textbook chapters providing treatment recommendations for SD, 6 (6%) specifically discussed treatments for Black patients. All articles were written by authors with medical or scientific backgrounds. Of the treatment options discussed, topical antifungals generally were considered first-line for SD in all patients, with ketoconazole shampoo being a common first choice.[4,5]

Comment

Our study indicated that many consumer websites recommend unstudied nonmedical treatments for SD. Zinc pyrithione was one of the most commonly mentioned ingredients in OTC products to treat SD targeted toward Black patients, as its properties have contributed to ease of hair combing and less frizz.[6] Zinc pyrithione has antifungal properties that reduce the proliferation of *Malassezia furfur* as well as anti-inflammatory properties that reduce irritation, pruritus, and erythema in areas affected by SD.[7] Tea tree and peppermint oils also were commonly mentioned; the theory is that these oils mitigate SD by reducing yeast growth and soothing inflammation through antioxidant activity.[8,9] Coal tar also is used due to its keratoplastic properties, which slow the growth of skin cells and ultimately reduce scaling and dryness.[10] Yeast thrives in basic pH conditions; apple cider vinegar is used as an ingredient in OTC products for SD because its acidic pH creates a less favorable environment for yeast to grow.[11] Although many of the ingredients found in OTC products we identified have not yet been studied, they have properties that theoretically would be helpful in treating SD.

Our review of the medical literature revealed that while there are treatments that are effective for SD, the recommended use may not consider the cultural differences that exist for Black patients. For instance, reports in the literature regarding ketoconazole shampoo revealed that ketoconazole increases the risk for hair shaft dryness, damage, and subsequent breakage, especially in Black women who also may be using heat styling or chemical relaxers.[5] As a result, ketoconazole should be used with caution in Black women, with an emphasis on direct application to the scalp rather than the hair shafts.[12] Additional options reported for Black patients include ciclopirox olamine and zinc pyrithione, which may have fewer risks.[13]

When prescribing medicated shampoos, traditional instructions regarding frequency of use to control symptoms of SD range from 2 to 3 times weekly to daily for a specified period of time determined by the dermatologist.[14] However, frequency of hair washing varies greatly among Black patients, sometimes occurring only once monthly. The frequency also may change based on styling techniques (eg, braids, weaves, and wigs).[15] Based on previous research underscoring the tendency for Black patients to use medicated shampoos less frequently than White patients, it is important for clinicians to understand that these cultural practices can undermine the effectiveness when medicated shampoos are prescribed for SD.[16]

Additionally, topical corticosteroids often are used in conjunction with antifungals to help decrease inflammation of the scalp.[17] An option reported for Black patients is topical fluocinolone 0.01%; however, package instructions state to apply topically to the scalp nightly and wash the hair thoroughly each morning, which may not be feasible for Black patients based on previously mentioned differences in hair-washing techniques. An alternative option may be to apply the medication 3 to 4 times per week, washing the hair weekly rather than daily.[18] Fluocinolone can be used as an ointment, solution, oil, or cream.[19,20] When comparing treatment vehicles for SD, a study conducted by Chappell et al[21] found that Black patients preferred using ointment or oil vehicles; White patients preferred foams and sprays, which may not be suitable for Afro hair patterns. As such, using less-drying modalities may increase compliance and treatment success in Black patients. For patients who may have involvement on the hairline, face, or ears along with hypopigmentation (which is a common skin concern associated with SD), calcineurin inhibitors can be used until resolution occurs.[5,22] High et al[15] found that twice-daily use of pimecrolimus rapidly normalized skin pigmentation during the first 2 weeks of use. Overall, personalization of treatment may not only avoid adverse effects but also ensure patient compliance, with the overall goal of treating to reduce yeast activity, pruritus, and dyschromia.[22]

Interestingly, after the website searches were completed for this study, the US Food and Drug Administration approved topical roflumilast foam for SD. In a phase III trial of 457 total patients, 36 Black patients were included.[23] It was determined that 79.5% of patients

overall throughout the trial achieved Investigator Global Assessment success (score of 0 [clear] or 1 [almost clear]) plus ≥2-point improvement from baseline (on a scale of 0 [clear] to 4 [severe]) at weeks 2, 4, and 8. Although there currently are no long-term studies, roflumilast may be a promising option for Black patients with SD.[23]

Aside from developing an individualized treatment approach for Black patients with SD, it is important to ask targeted questions during the clinical encounter to identify factors that may be exacerbating symptoms, especially due to the wide range of hair care practices used by the Black community (eTable 2). Asking targeted questions is especially important, as prior studies have shown that extensions, hair relaxers, and particular hair products can irritate the scalp and increase the likelihood of developing SD.[21,24] Rucker Wright et al[25] evaluated different hair care practices among young Black females and their association with the development of SD. The authors found that using hair extensions (either braided, cornrowed, or ponytails), chemical relaxers, and hair oils every 2 weeks was associated with SD. The study also found that SD rates were roughly 20% higher among Black girls with extensions compared to Black girls without extensions, regardless of how frequently hair was washed.[25]

Many Black patients grease the scalp with oils that are beneficial for lubrication and reduction of abrasive damage caused by grooming; however, they also may increase incidence of SD.[26] Tight curls worn by Black patients also can impede sebum from traveling down the hair shaft, leading to oil buildup on the scalp. This is the ideal environment for increased *Malassezia* density and higher risk for SD development.[27] To balance the beneficial effects of hair oils with the increased susceptibility for SD, providers should emphasize applying these oils only to distal hair shafts, which are more likely to be damaged, and avoiding application to the scalp.[19]

Conclusion

Given its long-term relapsing and remitting nature, SD can be distressing for Black patients, many of whom may seek additional treatment options aside from those recommended by health care professionals. In order to better educate patients, it is important for dermatologists to know not only the common ingredients that may be present in OTC products but also the thought process behind why patients use them. Additionally, prescription treatments for Black patients with SD may require nuanced alterations to the product instructions that may prevent health disparities and provide culturally sensitive care. Overall, the literature regarding treatment for Black patients with SD is limited, and more high-quality studies are needed.

REFERENCES

1. Tucker D, Masood S. Seborrheic dermatitis. *StatPearls [Internet]*. Updated March 1, 2024. Accessed December 19, 2024. https://www.ncbi.nlm.nih.gov/books/NBK551707/
2. Borda LJ, Wikramanayake TC. Seborrheic dermatitis and dandruff: a comprehensive review. *J Clin Investig Dermatol*. 2015;3:10.13188/2373-1044.1000019.
3. American Academy of Dermatology. Seborrheic dermatitis by the numbers. American Academy of Dermatology Skin Disease Briefs. Updated May 5, 2018. Accessed November 22, 2024. https://www.aad.org/asset/49w949DPcF8RSJYIRHfDon
4. Davis SA, Naarahari S, Feldman SR, et al. Top dermatologic conditions in patients of color: an analysis of nationally representative data. *J Drugs Dermatol*. 2012;11:466-473.
5. Borda LJ, Perper M, Keri JE. Treatment of seborrheic dermatitis: a comprehensive review. *J Dermatolog Treat*. 2019;30:158-169.
6. Draelos ZD, Kenneally DC, Hodges LT, et al. A comparison of hair quality and cosmetic acceptance following the use of two anti-dandruff shampoos. *J Investig Dermatol Symp Proc*. 2005;10:201-214.
7. Barak-Shinar D, Green LJ. Scalp seborrheic dermatitis and dandruff therapy using a herbal and zinc pyrithione-based therapy of shampoo and scalp lotion. *J Clin Aesthet Dermatol*. 2018;11:26-31.
8. Satchell AC, Saurajen A, Bell C, et al. Treatment of dandruff with 5% tea tree oil shampoo. *J Am Acad Dermatol.* 2002;47:852-855.
9. Herro E, Jacob SE. Mentha piperita (peppermint). *Dermatitis*. 2010;21:327-329.
10. Sanfilippo A, English JC. An overview of medicated shampoos used in dandruff treatment. *Pharm Ther*. 2006;31:396-400.
11. Arun PVPS, Vineetha Y, Waheed M, et al. Quantification of the minimum amount of lemon juice and apple cider vinegar required for the growth inhibition of dandruff causing fungi *Malassezia furfur*. *Int J Sci Res in Biological Sciences*. 2019;6:144-147.
12. Gao HY, Li Wan Po A. Topical formulations of fluocinolone acetonide. Are creams, gels and ointments bioequivalent and does dilution affect activity? *Eur J Clin Pharmacol*. 1994;46:71-75.
13. Pauporte M, Maibach H, Lowe N, et al. Fluocinolone acetonide topical oil for scalp psoriasis. *J Dermatolog Treat*. 2004;15:360-364.
14. Elgash M, Dlova N, Ogunleye T, et al. Seborrheic dermatitis in skin of color: clinical considerations. *J Drugs Dermatol*. 2019;18:24-27.
15. High WA, Pandya AG. Pilot trial of 1% pimecrolimus cream in the treatment of seborrheic dermatitis in African American adults with associated hypopigmentation. *J Am Acad Dermatol*. 2006;54:1083-1088.
16. Hollins LC, Butt M, Hong J, et al. Research in brief: survey of hair care practices in various ethnic and racial pediatric populations. *Pediatr Dermatol*. 2022;39:494-496.
17. Halder RM, Roberts CI, Nootheti PK. Cutaneous diseases in the black races. *Dermatol Clin*. 2003;21:679-687, ix.
18. Alexis AF, Sergay AB, Taylor SC. Common dermatologic disorders in skin of color: a comparative practice survey. *Cutis*. 2007;80:387-394.
19. Friedmann DP, Mishra V, Batty T. Progressive facial papules in an African-American patient: an atypical presentation of seborrheic dermatitis. *J Clin Aesthet Dermatol*. 2018;11:44-45.
20. Clark GW, Pope SM, Jaboori KA. Diagnosis and treatment of seborrheic dermatitis. *Am Fam Physician*. 2015;91:185-190.
21. Chappell J, Mattox A, Simonetta C, et al. Seborrheic dermatitis of the scalp in populations practicing less frequent hair washing: ketoconazole 2% foam versus ketoconazole 2% shampoo. three-year data. *J Am Acad Dermatol*. 2014;70:AB54.
22. Dadzie OE, Salam A. The hair grooming practices of women of African descent in London, United Kingdom: findings of a cross-sectional study. *J Eur Acad Dermatol Venereol*. 2016;30:1021-1024.
23. Blauvelt A, Draelos ZD, Stein Gold L, et al. Roflumilast foam 0.3% for adolescent and adult patients with seborrheic dermatitis: a randomized, double-blinded, vehicle-controlled, phase 3 trial. *J Am Acad Dermatol*. 2024;90:986-993.
24. Taylor SC, Barbosa V, Burgess C, et al. Hair and scalp disorders in adult and pediatric patients with skin of color. *Cutis*. 2017;100:31-35.
25. Rucker Wright D, Gathers R, Kapke A, et al. Hair care practices and their association with scalp and hair disorders in African American girls. *J Am Acad Dermatol*. 2011;64:253-262.
26. Raffi J, Suresh R, Agbai O. Clinical recognition and management of alopecia in women of color. *Int J Womens Dermatol*. 2019;5:314-319.
27. Mayo T, Dinkins J, Elewski B. Hair oils may worsen seborrheic dermatitis in Black patients. *Skin Appendage Disord*. 2023;9:151-152.

APPENDIX

eTABLE 1. Ingredients in OTC Products Used to Treat Seborrheic Dermatitis

Ingredient	No. of Mentions in Search Results	Common Products Containing Ingredient
Zinc pyrithione	27	Shampoo
Peppermint and/or tea tree oil	18	Hair serum, scalp cleanser
Charcoal	9	Shampoo
Ketoconazole	7	Shampoo
Aloe vera	6	Shampoo, conditioner
Coconut oil or milk	6	Shampoo, hair serum, leave-in conditioner
Salicylic acid	6	Shampoo, hair serum
Selenium sulfide	5	Shampoo
Apple cider vinegar	3	Shampoo, conditioner, scalp cleanser
Avocado oil	3	Hair serum, hair oil
African Black soap	2	Shampoo
Coal tar	2	Shampoo
Moroccan oil	2	Hair serum, hair oil
Pure essential oil combination	2	Hair serum
Castor oil	1	Hair serum, hair oil

eTABLE 2. Questions to Ask Black Patients With Symptoms of Seborrheic Dermatitis

How often do you wash your hair?
How often do you cut your hair?
Do you use hair oils on your scalp? If so, what kind?
Do you use hair gels, hair grease, or edge control?
What brand(s) of shampoo and conditioner do you use?
Do you wear braids, twists, wigs, weaves, or faux locs? If so, how often do you get these protective styles done?
Have you been diagnosed with SD in the past? If so, what medications were you prescribed?
If you were prescribed medications in the past, did you experience improvement of symptoms?
Have you tried any homemade remedies to treat your symptoms?
What other medical conditions do you have?

Abbreviation: SD, seborrheic dermatitis.