Scarring alopecia of the scalp from sarcoidosis: A case report

Laura F. Sandoval1, D.O., Jonathan S. Crane2,3, D.O.

1Sampson Regional Medical Center, Dermatology Resident, POY-3, Clinton, NC, 2Sampson Regional Medical Center, Dermatology Residency Program Director, Clinton, NC, 3DermOne, Wilmington, NC

Introduction
- Sarcoidosis is a systemic disease that can involve the skin in 25% of patients, however, cutaneous sarcoidosis of the scalp is uncommon.1
- A 2012 review of literature identified 39 cases of sarcoidosis induced alopecia, which included both scarring and non-scarring cases.
- Cutaneous sarcoidosis has been referred to as the great imitator of other skin diseases and is often a diagnosis of exclusion. Sarcoidosis alopecia similarly has been mistaken for discoid lupus erythematosus or other scarring alopecia, as well as, necrobiosis lipoidica. 2,3 Infectious causes of granulomas on histopathology must also be ruled out.

Case
- A 51 year-old African American female presented for evaluation of “Infection of the scalp”. She had previously been treated with cephalexin and topical mupirocin without significant improvement.
- On physical exam, there was alopecia of the entire scalp, except for a few areas of thin patchy hair, and follicular openings. (Figure A) There were large hypertrophic plaques and areas of superficial erosions involving smooth, shiny, hypopigmented patch covering the left side of the scalp. (Figures B & C) There were also scattered small hyperpigmented papules and plaques on the remainder of the scalp.
- On further history, patient stated she had a long history of hair loss, not previously worked up. The current lesions ("infection") had been present for approximately 2 years, gradually worsening. She also had a past diagnosis of systemic sarcoidosis with pulmonary involvement, but she had not received medical care for many years. In addition, she had a recent diagnosis of breast carcinoma.
- A 4-mm punch biopsy was obtained from the left parietal scalp. Differential diagnosis included: discoid lupus erythematosus, sarcoidosis, lichen planopilaris, however a secondary infection (fungal or bacterial) or malignancy such as squamous cell carcinoma were also considered.
- Histopathology showed no hair follicles, the dermis replaced by fibrosis, and the presence of multiple epithelioid granulomas. (Figures D & E) The findings were consistent with a scarring alopecia due to granulomatous inflammation consistent with sarcoidosis.
- Pending pathology results, the patient was started on topical clobetasol ointment, with significant improvement after one month. Given the severity of disease, systemic treatment was recommended. After discussion with the patients’ oncologist, it was decided that prednisone would be initiated. Once her cancer treatment was complete, the plan was to switch to hydroxychloroquine or methotrexate, however patient was lost to follow-up.

Discussion
- We report a case of sarcoidosis presenting as severe scarring alopecia.
- Scarring alopecia of the scalp from sarcoidosis is rare and usually presents as a few patches of hair loss resembling discoid lupus erythematosus, however, rarely is diffuse scarring alopecia reported.2,6
- A review of literature showed that sarcoidosis of the scalp is predominately in females and African Americans and is often associated with systemic involvement.2,7 Therefore, a diagnosis of cutaneous sarcoidosis of the scalp alone warrants a work-up for systemic disease. Patients should also have a full skin exam since involvement of other skin sites are usually present with sarcoidosis of the scalp.2,7 In our patient cutaneous sarcoidosis was limited to the scalp.
- Sarcoidosis of the scalp can be difficult to treatment. Treatment options include: topical, oral, and intralesional corticosteroids, immunosuppressive agents such as azathioprine and methotrexate, and hydroxychloroquine, with oral prednisone most frequently providing improvement.2,3 While treatment may successfully halt progression of disease, if may not result in hair regrowth.

Disclosures: Drs. Sandoval and Crane have no conflicts to disclose.

References