

# LETTERS TO THE EDITOR

## Hyperpigmentation Associated With Selenium Sulfide Lotion

To the Editor:

Selenium sulfide 1% is a widely available, over-the-counter topical agent for the treatment of dandruff. It generally is considered to be safe for use by adults and children. Package instructions and warnings in the *Physicians' Desk Reference* do not mention hyperpigmentation as a possible side effect.<sup>1</sup> I report here such an adverse reaction to a brief exposure to selenium sulfide lotion 1%.

### CASE REPORT

A 49-year-old African-American male applied shampoo containing selenium sulfide lotion 1% according to package directions for flaking and itching of dandruff for the first time in early November 1994. In mid-November 1994, he made a second application, again according to directions. During the approximately 2 minutes of shampoo application, an intense tingling sensation was noted but no other symptoms occurred. The next day, he noticed darkening of the scalp unaccompanied by other symptoms such as pain, itching, redness, swelling, or exudate. There was no past history of cutaneous allergy or contact dermatitis. No other topical preparations had been used.

On examination the next day, male pattern baldness of the frontal area extending to the vertex was noted with a patchy hyperpigmentation of the scalp with dryness of the affected skin and mild flaking. No other cutaneous abnormalities were noted. Biopsy and photograph was refused.

Although use of selenium sulfide was discontinued, the hyper-

pigmentation has persisted and increased somewhat over the subsequent 5 months being especially noticeable in bald areas and along the frontal hairline, which has receded 1 to 2 cm during this period of observation.

### DISCUSSION

Hyperpigmentation in reaction to a brief topical exposure to selenium sulfide is not described in the *Physicians' Desk Reference* or in the literature.<sup>1,2</sup> A case of reversible nail pigmentation due to selenium sulfide treatment for tinea versicolor of several months duration has been reported.<sup>3</sup>

In a randomized trial in which 100 patients were assigned to 4 weeks of shampoos with 2.5% selenium sulfide shampoos twice weekly, nine of these patients experienced adverse experiences during the active treatment phase including one case of "orange staining of the scalp."<sup>4</sup> None of the other 146 patients in placebo or ketoconazole groups had adverse experiences during the active treatment phase.

There has been no report that black patients in particular may experience such unexpected reactions. The reported rapid appearance of pigmentation was remarkable in this case, especially in the absence of other medications such as mercury.

Dermatologists should report any similar reactions so that their frequency in black and white patients may be assessed. Although biopsy and serial photographs were not possible in this case, they should be obtained for future case reports if possible. If they occur with appreciable frequency, appropriate warnings should appear in the *Physicians' Desk Reference* and in promotional information for physicians and oth-

ers who might recommend this product to their patients or clients.

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### Literature Cited

1. *Physician's Desk Reference*. 48th ed. Montvale, NJ: Medical Economics Data Production Co; 1994.
2. Cummins LMM, Kimura ET. Safety evaluation of selenium sulfide shampoo. *Toxicol Appl Pharmacol*. 1971;20:89-96.
3. Wolf R, Perluk C, Krakowski A. Nail pigmentation resulting from selenium sulfide and copper. *Int J Dermatol*. 1989;28:556-557.
4. Danby FW, Maddin WS, Margesson LJ, Rosenthal D. A randomized, double-blind placebo-controlled trial of ketoconazole shampoo versus selenium sulfide 2.5% shampoo in the treatment of moderate to severe dandruff. *J Am Acad Dermatol*. 1993;29:1008-1012.

### Proper Management of HIV/AIDS Disease

To the Editor:

I believe that the knowledge necessary to solve the human immunodeficiency virus (HIV)/acquired immunodeficiency virus (AIDS) problem has been hidden in the medical literature for years. I have observed that the combination of corticotropin, dexamethasone, and vitamin C to relieve rheumatoid arthritis, and heparin to relieve thrombophlebitis not only took the pain away but also remarkably improved the patient's general condition during the same office visit. The finding that really impressed me the most was the rapid resolution of an opportunistic infection in one patient who tested HIV positive a few months later.

These patients experience reversal of their fatigue, weakness, and depression. Their words continue to ring in my ears: "The shot wakes me up and gets me back to normal. The