

CORRESPONDENCE

This department is for the publication of informal communications that are of interest because they are informative and stimulating, and for the discussion of controversial matters. The mandate of this JOURNAL is to disseminate information relating to leprosy in particular and also other mycobacterial diseases. Dissident comment or interpretation on published research is of course valid, but personality attacks on individuals would seem unnecessary. Political comments, valid or not, also are unwelcome. They might result in interference with the distribution of the JOURNAL and thus interfere with its prime purpose.

Irrational Use of Skin-Bleaching Products Can Delay the Diagnosis of Leprosy

TO THE EDITOR:

The cosmetic use of skin-bleaching products is considered a common practice today in women from Sub-Saharan Africa (¹). In Bamako, the capital of Mali, 25% of adult women currently reported the use of such products (²). Well-known complications of that practice are nephrotic syndromes related to the use of mercury (¹), and exogenous ochronosis related to long-lasting use of hydroquinone (²). Recently, topical glucocorticoids are also widely-used and are potent lighteners (³). To our knowledge, no consequences of this practice on leprosy presentation have been reported. We would like to report here a patient in whom the inopportune use of such bleaching products was at the origin of noteworthy changes in the presentation of borderline leprosy, with an important delay in diagnosis.

CASE REPORT

An 18-year-old woman visited our dermatological center for a pruriginous lesion on one side of her neck for which a diagnosis of tinea corporis was made. During the same visit, deformities of her hands were noticed. A neurological examination showed severe peripheral nerve damage, including complete paralysis of the right ulnar nerve with an ulnar claw, paresis of both facial nerves with bilateral lagophthalmos, and anesthesia of both soles; ulnar and posterior tibial nerves were thickened and painless. A

detailed dermatological examination revealed a discrete normochromic lesion on the right cheek, consisting of a slightly raised and polycyclic linear lesion (Fig. 1).

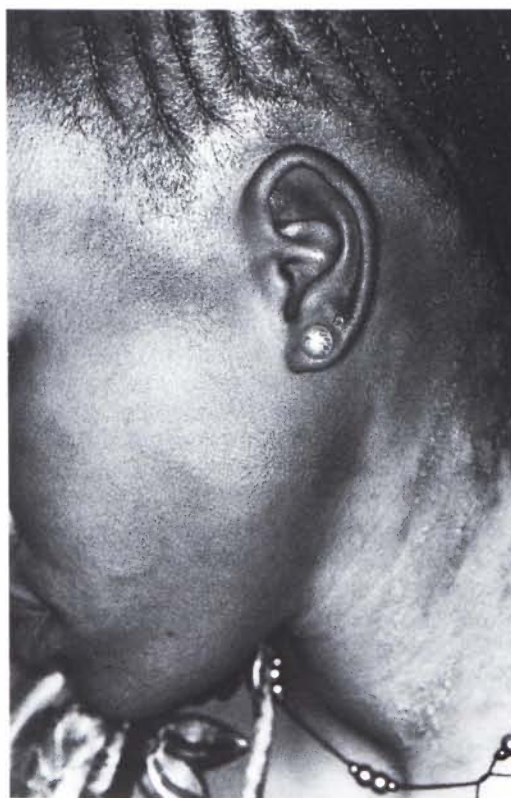


FIG. 1. Hardly visible lesion on the cheek in a woman using skin-bleaching products.



FIG. 2. Large strange-looking lesion on the thigh in the same patient.

a similar lesion on the opposite side of the chin, and large bizarre lesions with geographical outlines on her inner thighs (Fig. 2) and buttocks. Superficial sensitivity testing showed marked hypesthesia of the cheeks (above the linear lesions of cheek and chin), and of the anterior sides of her thighs.

The patient reported that this had begun several years ago with a clear spot on her face, and that she had been using skin-lightening products continuously for 4 years in order to mask the skin lesions. The products were applied especially on the healthy skin contiguous to the hypochromic areas, in order to attenuate the contrast. The peripheral nerves' involvement had begun only 2 years ago. The bleaching products had been bought at corner shops in her neighborhood. According to the indications showing on the packages of the brands used, the products contained 0.05% clobetasol propionate (Movate® cream, Tenovate® cream), and hydroquinone (Skin Light® cream).

The skin-bleaching practice was discontinued. A biopsy specimen of the skin of one thigh showed borderline tuberculoid leprosy. Slit-skin smears did not find acid-

fast bacilli. Two weeks after the cessation of the bleaching practice, a frank hypochromia of the cheek was obvious (Fig. 3). A 6-month WHO-Multidrug Therapy regimen for paucibacillary leprosy was instituted. One year later, no improvement of the nerve damage had occurred.

DISCUSSION

Today the cosmetic use of bleaching products (BPs) is a very common practice in adult dark-skinned women who originated from, or who are living in Sub-Saharan Africa^(3,5). In that perspective, potent lighteners, such as class I steroids or hydroquinone-containing products, are easily available over-the-counter at low prices⁽⁴⁾. In Dakar as in most cities of Senegal, non-medical retailers of these products can be found easily in almost every neighborhood. Thus, BPs are largely used by the adult female population, mainly for cosmetic purposes, but also for self-medication. In addition to the possible induction of specific complications^(1,2), the use of these products can modify the features of incidental skin diseases. In our patient, the use of skin-bleaching products masked hypochromia

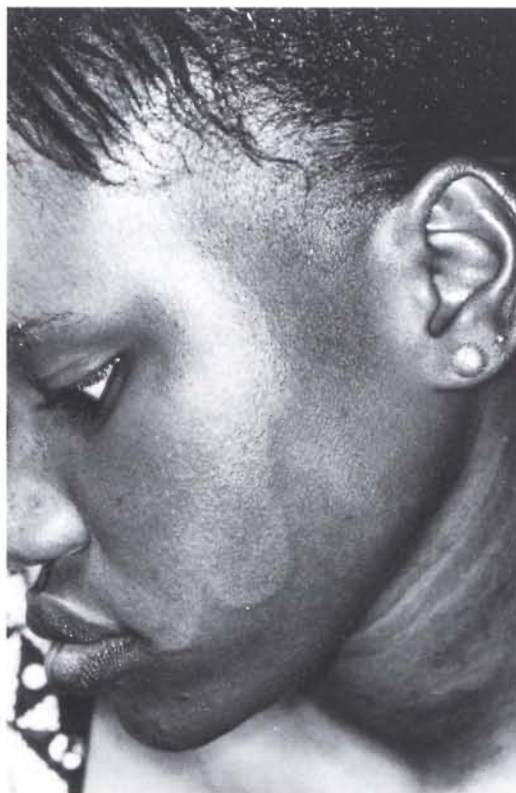


FIG. 3. Same lesion than Figure 1 two weeks after the bleaching practice was stopped. Frank hypochromia can be easily seen.

related to leprosy through voluntary lightening of contiguous healthy skin, and typical cutaneous features could only be seen after the bleaching practice was stopped. We believe that hiding the signs of leprosy strongly contributed to the important delay of diagnosis as observed, with consecutive severe and irreversible nerve damage. We are not aware of any other reported cases with such consequences of the use of BPs.

Nevertheless, owing to today's huge extent of uncontrolled BP use and the wide availability of skin-lightening products, similar cases might be seen.

—Antoine Mahé, M.D., Ph.D.
Fatimata Ly, M.D.

*Department of Dermatology,
Institut d'Hygiène Sociale,
Dakar, Senegal*

—Charles Badiane, M.D.
Yaya Baldé, M.D.

*Institut de Léprologie Appliquée de Dakar,
Dakar, Senegal*

—Jean-Marie Dangou, M.D.

*Department of Pathology,
Institut Pasteur,
Dakar, Senegal*

Reprint requests to Dr. A. Mahé, BP 16705 Dakar-Fann, Senegal; Tel + Fax: (221) 825 96 54. e-mail: mahe@refer.sn.

REFERENCES

1. BARR, R. D., REES, P. H., CORDY, P. E., KUNGU, A., WOODGER, B. A. and CAMERON, H. M. Nephrotic syndrome in adult Africans in Nairobi. *Br. Med. J.* **2** (1972) 131–134.
2. FINDLAY, G. H., MORRISON, J. G. L. and SIMSON, I. W. Exogenous ochronosis and pigmented colloid milium from hydroquinone bleaching creams. *Br. J. Dermatol.* **93** (1975) 613–622.
3. GODLEE, F. Skin lighteners cause permanent damage. *Br. Med. J.* **305** (1992) 33.
4. KEANE, F. M., MUNN, S. E., TAYLOR, N. F. and DU VIVIER, A. W. P. Unregulated use of clobetasol propionate. *Br. J. Dermatol.* **144** (2001) 1095–1096.
5. MAHÉ, A., BLANC, L., HALNA, J. M., KÉITA, S., SANOGO, T. and BOBIN, P. Enquête épidémiologique sur l'utilisation cosmétique de produits dépigmentants par les femmes de Bamako (Mali). *Ann. Dermatol. Venereol.* **120** (1993) 870–873.