

Olumide YM, Akinkugbe AO, Altraide D, Mohammed T, Ahamefule N, Ayanlowo S, *et al.* Complications of chronic use of skin lightening cosmetics. *Int J Dermatol* 2008; 47: 344–53

Skin lightening (bleaching) cosmetics and toiletries are widely used in most African countries. The active ingredients in these cosmetic products are hydroquinone, mercury, and corticosteroids. Several additives (concoctions) such as lemon juice, potash, toothpaste, liquid milk, pulverized naphthalene balls, vitamin C, peroxides and chlorates used in hair dyes, and chemicals incorporated in soaps are used to enhance the bleaching effect. Percutaneous absorption increases with long-term use of these products on a large body surface area (either as ‘immersion bath’ or topically) and under hot humid conditions. The complications arising with the use of these products are very serious and are sometimes fatal. Complications of hydroquinone include dermatitis, exogenous ochronosis, cataract, pigmented colloid milia, scleral and nail pigmentation, and patchy depigmentation. When used for pruritic papular eruption of HIV in commercial sex workers, the skin of the extremities appear scruffy with excoriated papules on a background of ochronotic and bleached skin. Other complications are impaired wound healing and wound dehiscence, and the fish odor syndrome, due to hydroquinone and its metabolites. Mercury bleaches the skin by inactivating the sulfhydryl enzymes. Nephropathy due to mercury is a well-known complication, generally due to chronic use. Though it is commonly used as a bleaching agent, paradoxically, chronic use of mercury can lead to increased pigmentation due to accumulation of mercury granules in the dermis. Deposition of mercury in keratin also leads to brittleness and discoloration of nails. Corticosteroids bleach the skin, and it is believed that they lighten the skin due to inhibition of endogenous steroid production, and thus decrease the precursor hormone levels. The topical steroids are also cytostatic to the epidermis, leading to less-pigmented melanocytes in the skin. The use of potent steroids leads to steroid addiction syndrome, predisposition

to infections, and a broad spectrum of cutaneous and endocrinologic complications, including suppression of hypothalamic-pituitary-adrenal axis. In this era of easy travel and migration, African patients with these complications can present to physicians anywhere in the world. It is therefore critical for every practicing physician to be aware of these complications.

**Comment:** The concept of fairness creams is not new to India. The belief that “fair is beautiful” is widely held, and crosses boundaries of age, caste, religion, and social status. This belief is promoted in no small measure by aggressive marketing and advertisement strategies. There is a paucity of data on the exact composition of these creams, most of which can be purchased over the counter. Products available in India contain a wide variety of compounds; those listed on the label include allantoin, dimethicone, ascorbic acid, vitamin E, niacinamide, titanium dioxide, octyl methoxy cinnamates, butyl methoxy dibenzoyl methane, etc. It is anybody’s guess whether these products do contain harmful ingredients which escape a mention on the label. Although the use of hydroquinone in cosmetics is banned in South Africa and the European Union, complications due to its illegal use continue to occur in those countries. It is imperative that dermatologists be aware of the complications that can arise from the long-term use of these products from a medical point of view. However, from a social standpoint, they should also attempt to understand the deep-rooted psyche behind the use of fairness-enhancing products so that they may help the public make informed decisions regarding their use/misuse.

Vermaat H, Kirtschig G. Prevention and treatment of glucocorticoid-induced osteoporosis in daily dermatologic practice. *Int J Dermatol* 2008;47:737-42

Systemic glucocorticoids (GCs) are often needed to treat dermatologic patients. The long-term use of GCs, however, is associated with potentially severe side effects. GC-induced osteoporosis (GIO) is one of the most serious complications, but the risk of the occurrence

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of GIO seems to be generally underestimated.

This article aims to provide an update of the recent advances in the prevention of GIO in dermatologic practice, by review of the literature and several European and US guidelines up to August 2007. Data regarding the prevention and treatment of GIO are limited and guidelines for the prevention of GIO are not fully consistent. The prophylaxis of osteoporosis needs to be started early during treatment with GCs. Calcium and vitamin D supplements in all patients on systemic GCs and bisphosphonates in patients who take GCs for more than three months are practical and effective measures.

**Comment:** Glucocorticoids are widely used in dermatology for a variety of indications. Patients treated by dermatologists usually receive medium to high doses of steroids at the start of treatment, with an unpredictable taper. The authors have eliminated most of the confusion arising from various guidelines, and have proposed simplified measures for osteoporosis prophylaxis in order to improve clinical practice. Some of these measures include using the lowest possible steroid dose for the shortest possible treatment period, giving advice to patients on lifestyle measures such as nutrition and exercise, supplementing calcium and vitamin D in all patients on steroids, and the use of bisphosphonates in patients on >5 mg of prednisolone daily for more than three months. The authors also highlight the fact that bone loss is most rapid in the first year of the therapy, although a significant decrease in bone mineral density can be seen as soon as three months after starting steroids. In view of the fact that trials show significant bone loss with daily doses of prednisolone equivalent of 5 mg, dermatologists need to be particularly vigilant with patients on long-term steroid therapy.

Alpsoy E, Donmez L, Onder M, Gunasti S, Usta A, Karincaoglu Y, *et al.* Clinical features and natural course of Behcet's disease in 661 cases: a multicentre study. *Br J Dermatol* 2007;157:901-6

Behcet's disease (BD) is a systemic inflammatory disease with unpredictable exacerbations and remissions. The natural course of BD is not fully known. The study aimed retrospectively to determine the occurrence of the symptoms in chronological order, evaluated the influence of the treatment and follow-up on the clinical severity, and tried to identify the factors determining severe organ involvement. Six hundred and sixty one

patients were involved in this multicenter study. The symptoms of the disease were recorded retrospectively in the time order of the manifestations in each patient. Oral ulcers were the most common manifestation (100%), followed by genital ulcers (85.3%), papulopustular lesions (55.4%), erythema nodosum (44.2%), skin pathergy reaction (37.8%), and articular (33.4%) and ocular involvement (29.2%). Oral ulcers were the most common onset manifestation (88.7%). The mean  $\pm$  SD duration between the onset symptom and the fulfillment of diagnostic criteria was calculated to be  $4.3 \pm 5.7$  years. The clinical severity score was significantly increased in the noncompliant treatment group compared with the compliant group with the passage of time ( $P < 0.001$ ). The frequency of ocular involvement and genital ulcers was significantly higher in patients whose disease onset was at  $< 40$  years. Genital ulcers, ocular involvement, papulopustular lesions, thrombophlebitis, and skin pathergy reaction were found to be significantly more frequent in males. The study concludes that mucocutaneous lesions are the hallmarks of the disease, and especially oral ulcers precede other manifestations, the increase in clinical severity score is more pronounced in patients without regular treatment and follow-up, and male sex and a younger age at onset are associated with more severe disease.

**Comment:** The natural course of BD is not fully known. The onset of symptoms, occurrence of other symptoms, and duration of these symptoms vary from patient to patient. The recruitment of a high number of subjects in this study has enabled the evaluation of the full spectrum of the disease, including relatively rare organ involvement. Mucocutaneous lesions are the recognized hallmarks of BD, as indicated by this study, also, with oral ulcers occurring in 100%, genital ulcers in 85.3%, papulopustular lesions in 55.4%, and erythema nodosum in 44.2% of the patients. The frequency of papulopustular lesions may have been underestimated in this study, as stated by the authors, since it is almost impossible to differentiate them from acne lesions. Hence, only those patients in whom papulopustular lesions were considered specific for BD by a dermatologist were included. The diagnosis of BD is primarily clinical, as there is no pathognomonic laboratory test for confirmation (skin pathergy test was positive in only 37.8% of the patients in this study). The relatively long gap between fulfillment of diagnostic criteria and actual diagnosis ( $1.1 \pm 2.4$  years) indicates the need for dermatologists to maintain

a high index of suspicion for the diagnosis of BD. The authors suggest that all patients presenting with oral ulcers (the most common onset lesion), genital ulcers, erythema nodosum, and ocular symptoms such as uveitis, or any combination of these features should be evaluated and followed up for possible BD. It is all the more important to make the diagnosis early, since serious organ involvement (large vessel, neurological, and gastrointestinal) was found to occur late in the course of the disease, with the rate of increase in clinical severity score (rate of disease progression) being lower in patients on regular treatment. Studies like this one, which try to determine the natural course

of the disease, may help in making an early diagnosis, predicting severe organ involvement, and defining risk groups among patients with BD. These studies may also help to evaluate the effectiveness of selected therapeutic approaches.

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