Chinese herbal remedy found to contain steroids and antifungals

Kristian Fredløv Mose, PhD Anette Bygum, MD https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)30116-3/fulltext?dgcid=raven_jbs_etoc_email

A 14-year-old boy with early-onset guttate psoriasis vulgaris presented at our clinic with several reddishpurple, horizontal streaks on the distal part of his shins. Previously, he had been treated with narrowband ultraviolet B, topical corticosteroids ranging from mild (hydrocortisone 17-butyrate cream 1 mg/g) to moderate (mometasone furoate cream 1 mg/g and betamethasone valerate ointment 1 mg/g), and tacrolimus ointment 1 mg/g—but the response to treatment was not long lasting. The family consulted a licensed practitioner of traditional Chinese medicine who prescribed a so-called herbal cream (figure).

The patient applied the cream topically on the psoriatic lesions twice a day. After 9 months of doing this, he developed a new rash on his shins that was later confirmed to be striae distensae (figure). We suspected that the cause was exposure to a corticosteroid—but the patient had not been using a corticosteroid either topically or systemically during this time.

The so-called herbal cream was suspected as a possible source; however, the content label only listed herbal ingredients including Chinese sumac, Sophora flavescens, Stemona tuberosa Lour. Nevertheless, the location of the striae was very unusual, and as a simple test, the herbal cream was applied on the upper arm of the senior physician; after 12 h, a strong vasoconstriction effect was seen (figure), which further raised our suspicion that the cream contained a corticosteroid. We therefore sent it for analysis at the Department of Official Medicines Control Laboratory, Swedish Medical Products Agency, Uppsala, Sweden. The laboratory used liquid chromatography-tandem mass spectrometry and nuclear magnetic resonance, and reported that the cream contained both a potent corticosteroid (0·065% clobetasol propionate) and the antifungals ketoconazole and miconazole. We then reported this herbal product to the Danish Medicines Agency to ensure that it was dealt with appropriately.

Prolonged exposure to traditional herbal creams or ointments resulting in cutaneous striae has previously been reported, and the Medicines and Healthcare products Regulatory Agency has warned about a so-called natural Chinese herbal remedy—Yiganerjing Cream—containing the same ingredients as in our case. Furthermore, the hazards and adverse effects of herbal products are not confined to dermatology. The under-regulation of medicinal products is widespread, and the consequences of patients using such substances can be seen in clinics from all specialities. Patients who fail to respond adequately to conventional treatments often seek alternative treatment and as a result might expose themselves to potentially harmful agents. The importance of being vigilant when seeing patients taking and using herbal creams and remedies remains key to reaching the correct diagnosis. With such substances being freely available over the internet, the problem is likely to worsen.