

12983

**The effectiveness of high-dose ultraviolet A-1 phototherapy on acute exacerbated atopic dermatitis**

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Atopic dermatitis (AD) is a chronic inflammatory skin disease, characterized by pruritus, a chronic course of exacerbations and remissions. High-dose ultraviolet A-1 (UVA-1) phototherapy has been shown to be effective in the treatment of acute exacerbated AD, however, there was no previous case study in Asia. We present a retrospective review of our experiences with high-dose UVA-1 phototherapy. This study was conducted on 16 patients with acute exacerbation of AD. High-dose (100 J/cm<sup>2</sup>) regimens of UVA-1 therapy were employed. The therapeutic effectiveness was assessed according to the clinical examination and SCORAD index before and after the 5th and 10th sessions of treatment. In addition, side effects and recurrence during follow-up were retrospectively evaluated. The patients were between 7 and 50 years of age with average age of 25.8 years. The SCORAD index of 16 patients were between 41 and 89.5 with average score of 64.9. Among the 16 patients, two patients discontinued the treatment because of side effects such as erythema and pruritus. Of 14 patients who completed the 10 sessions of high-dose UVA-1 phototherapy, nine patients (64.3%) showed complete remission and five patients (35.7%) showed partial remission. The average SCORAD index was reduced from 64.2 (before treatment) to 23.3 (after 10th session of treatment). This is the first case study of high-dose UVA-1 phototherapy on Asian acute exacerbated AD patients, suggesting that high dose UVA-1 phototherapy can be a well tolerated and effective treatment for acute exacerbated AD. Afterwards, large-scale prospective studies are needed.

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13011

**Epidemiologic study: Focus on skin characteristics across Brazil regions and ethnicities**

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Background: Brazil's population is very diverse, containing 3 major ethnicities: Caucasian (47.8%), Mestizo (33.6%) and Black (12.8%). Lifestyles and stressful environments influence the status of different skin categories and can cause fragility of epidermis.

Methods: A cross-sectional survey was conducted in Brazil on a representative sample of 600 adults.

Results: We noticed that the prevalence is not different between skin types and regions. Across Brazil, skin symptoms prevalence varies a lot, pain will be more frequent in the north (46.2%) as xerosis (65.4%) but erythema will be more frequent in the southeast (44%) and pruritus in the northeast (59.3%). These symptoms also differ between skin types, as erythema is more frequent in Caucasians (50.5%) and tightness (33.8%) in Blacks. Acne is frequent in the Northeast (60.5%) as eczema (16.8%) and psoriasis (9.6%). Pigment spots will be much more frequent in the southeast (52.2%). Acne is a pathology whose frequency also differs between skin types, with a higher frequency in Indians (66.7%) and Mestizos (59.9%). Blacks have a higher prevalence of eczema (15.6%) while Caucasians have the highest frequency of psoriasis (9.8%).

Discussion: Fragile skin prevalence in Brazil is stable between skin types and regions, ranging from 46.2% in Asians to 70% in Caucasians and from 57.7% in the north to 67.2% in the southeast. However, the causes and symptoms throughout the country and ethnicities are very diverse. Meaning it is essential to consider the patient environment and skin type to best manage his pathology.

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12990

**Micropigmentation for refractory vitiligo: Updated evidence from a clinical and animal study**

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Background: Micropigmentation, also termed medical tattooing, can be a useful alternative treatment for patients with vitiligo who are resistant to conventional treatments.

Objective: To assess the benefits and risks of micropigmentation in the treatment of refractory vitiligo.

Methods: Between December 2018 and March 2019, 25 lesions of 14 patients with vitiligo (Fitzpatrick skin types III and IV) were subjected to micropigmentation using an electric tattooing machine. The procedure was repeated until satisfactory results were obtained. Treatment response was assessed by color matching of the treated lesion and surrounding skin using a 4-point scale (poor, fair, good, and excellent).

Results: Excellent color matching was achieved in 80% (20 of 25) of cases after a median of 3 (range 1-5) treatment sessions. Procedure-associated pain was considerable, but no anesthetic injection was needed. Immediate erythema and swelling were noticed after each procedure, but resolved within a few days. Overall, the treatment was tolerable.

Limitations: A small sample, no control group, and a short follow-up period.

Conclusions: Micropigmentation was beneficial for patients with refractory vitiligo who had light to moderately colored skin. Pigment selection, implantation depth, and selection of body parts amenable to treatment were critical.

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13014

**Primary cutaneous histiocytic sarcoma**

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We present the case of a 32-year-old African-American man with biopsy-proven primary cutaneous histiocytic sarcoma (PCHS) of the left nasal ala. The lesion had been present for 1.5 years and was asymptomatic. Biopsy of the nodule was originally diagnosed as granulocytic sarcoma, with further investigation revealing PCHS. Here we discuss the challenge of both diagnosis and treatment of a rare tumor on a cosmetically sensitive area without clear guidelines with regard to best-care practices. Histiocytic sarcoma is an extremely rare malignancy arising from mature histiocytes. PCHS is the cutaneous version of the disease, usually presenting as asymptomatic nodules, plaques, or subcutaneous tumors. PCHS localized to the skin confers a favorable prognosis with early intervention. Once metastasized, however, the prognosis is highly variable and treatment involves chemotherapy with possible stem cell transplant. Based on the limited cases reported in the literature, wide local excision is recommended, though specific surgical margins have not been detailed. There is a lack of data regarding the benefit of Mohs micrographic surgery. Biopsy is instrumental in differentiating PCHS from similarly presenting lesions. Histologically, PCHS has a predominantly spindled and pleomorphic appearance with hematoxylin and eosin staining, though monomorphic histiocytic appearance has been reported. High mitotic activity has been described. The phenotypic profile of PCHS includes positivity for CD45, CD2, CD14, CD68, CD163, and CD42. Negative markers include MXA, TCL1, CD30, CD117, CD8, CD34, CD123, CD83, langerin, S100, HMB45, CD3, CD5, CD7, and all B-cell markers.

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