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## **The PUVA-turban as a new option of applying a dilute psoralen solution selectively to the scalp of patients with alopecia areata**

Behrens-Williams SC, Leiter U, Schiener R, et al.

*J Am Acad Dermatol 2001;44:248-52.*

Alopecia areata is a chronic scalp dermatosis that has been shown to respond to systemic and topical PUVA therapy. A study was carried out to observe the efficacy of using PUVA-turban therapy in treating patients with resistant alopecia areata.

Nine patients with alopecia areata which were recalcitrant to conventional therapy were recruited. Their characteristics like age, gender, skin type, duration, severity of alopecia areata and previous treatment were recorded. A white towel was soaked with a solution containing 1 mg/L of psoralen (with 1 ml of a 0.5% alcoholic solution of 8-MOP per 5 L of water) at 37°C. This was then wrapped around the patient's head in a turban fashion for a duration of 20 minutes. This was followed by the application of the UVA radiation. The dose of the UVA was increased by 0.3-0.5 J/cm<sup>2</sup> every third session. The cumulative dose of UVA therapy given over a 24 week's interval was 60.9-178.2 J/cm<sup>2</sup>.

The results showed that six out of the nine patients received the treatment had 75-100% terminal hair regrowth. Few side effects were noticed. The authors concluded that PUVA-turban was a new therapeutic option for treating alopecia areata.

## **Utility of anti-bacillus Calmette-Guerin antibodies as a screen for organisms in sporotrichoid infections**

Bryd J, Mehregan DR, Mehregan DA.

*J Am Acad Dermatol 2001;44: 261-4.*

Sporotrichoid infections of the skin may be due to a number of causative organisms like sporotrichosis, blastomycosis, histoplasmosis, atypical mycobacteria such as *Mycobacterium marinum* and *M. kansasii*, as well as *Pasteurella tularensis* and *Nocardia brasiliensis*. Accurate histological diagnosis of these infections is difficult. An immunohistochemical staining with anti-bacillus Calmette-Guerin was developed and tested in a study to see the effectiveness of using it to demonstrate the aetiological agents.

Altogether, 13 specimens of confirmed sporotrichoid infections were stained with anti-BCG antibody. Samples with anti-BCG antibody stain were considered positive when the organisms were stained bright red by the Dako-labeled streptavidin-biotin detection system. Internal controls were performed with dermatophytes. In addition, tissue culture were performed if possible. Out of the five tissue cultures done, two were positive for *M. marinum* and one grew *S. schenckii*.

The authors concluded that immunohistochemical staining with anti-BCG was a cost effective method to identify the organisms in sporotrichoid infections. Moreover, the technique was convenient and easy to use.

## **Skin toxic effects of polyethylene glycol-coated liposomal doxorubicin**

Lotem M, Hubert A, Lyass O, et al.

*Arch Dermatol 2000;136:1475-80.*

Sixty patients (15 men and 45 women) with metastatic breast and prostate cancers receiving Doxil (encapsulation of doxorubicin hydrochloride in liposomes) were examined on a regular basis at every cycle of Doxil therapy and after specific skin complaints. While non-encapsulated doxorubicin toxicity consists of myelosuppression and myocardial damage, preclinical toxicologic studies and a phase one clinical study of Doxil showed only minimal alopecia, mild myelosuppression, and no apparent cardiotoxic effects. Four patterns of skin rash were observed: hand-foot syndrome (n=24), intertrigo-like eruption (n=5), diffuse follicular eruption (n=6), and formation of new melanotic macules (n=3). Stomatitis was another major dose-related toxic effect. Extravasation injuries and alopecia, which were toxic effects of non-encapsulated doxorubicin, did not occur. Doxil accumulates in tissues of increased microvascular permeability, such as skin, preferentially. This explains its wider skin toxicity. It also accumulates in tumors with active neoangiogenesis. It is highly stable and has a long circulation time, so providing a slow release pool of drug to tumor and other tissues.

The authors concluded that Doxil had a unique pharmacokinetics and tissue distribution which differentiate the profile of skin toxic effects from that of non-encapsulated doxorubicin.

### **Topical treatment of cutaneous lesions of acquired immunodeficiency syndrome-related Kaposi sarcoma using alitretinoin gel: Results of phase 1 and 2 trials**

Duvic M, Friedman-Kien AE, Looney DJ, et al.  
*Arch Dermatol* 2000;136:1461-9.

One hundred and fifteen patients with biopsy-proven acquired immunodeficiency syndrome (AIDS) related Kaposi sarcoma (KS) were treated with (0.05% or 0.1% gel) alitretinoin gel, twice daily for the first two weeks, and up to four times daily thereafter, for up to 16 weeks in a controlled, open-label, within-patient, dose-escalating phase 1 and 2 clinical trials. At least two other lesions served as untreated controls.

Twenty-seven percents of the patients for the group of treated index lesions showed a significant clinical response; as compared with 11% for the group of untreated control lesions ( $P < 0.001$ ). In some patients with resistance to previous systemic anti-KS therapy and with low CD4+ lymphocyte counts ( $< 200$  cells/ $\mu$ L), responses still occurred. For the treated index lesions, the incidence of disease progression was substantially lower compared with untreated control lesions (34% vs 46%;  $P = 0.02$ ). It was well tolerated, with 90% of treatment-related adverse events occurred on the application site which was mild and reversible. Nine percents of patients were discontinued prematurely due to local irritation. Plasma level of 9-cis-retinoic acid was not increased, indicating minimal potential for drug interactions.

The authors concluded that alitretinoin gel was generally well tolerated and had significant antitumor activity which could be used as an outpatient based topical treatment for AIDS-related KS lesions.

### **Pseudoporphyria and nonsteroidal antiinflammatory agents in children with juvenile idiopathic arthritis**

De Silva B, Banney L, Uttley W, et al.  
*Pediat Dermatol* 2000;17:480-3.

Pseudoporphyria is a photodermatosis which may present as blister, skin fragility, erythema, and scarring on light-exposed areas. Unlike other true cutaneous porphyria, it is not characterized by hypertrichosis, sclerodermoid skin changes, milia formation and plasma porphyrin levels are not raised. Some drugs, for example,

nonsteroidal antiinflammatory drugs have been associated with the occurrence of pseudoporphyria. A one-year prospective cohort study of children taking nonsteroidal antiinflammatory drugs for juvenile idiopathic arthritis was carried out and showed that the prevalence of pseudoporphyria was 10.9%. Among various nonsteroidal antiinflammatory drugs, naproxen was the most commonly implicated one, independent of dosage. Phototoxicity may be an important but not the only mechanism implicated. Naproxen absorbs ultraviolet radiation at wavelengths greater than 310 nm, generating free oxygen radicals which cause tissue damage. Another independent risk factor for the development of pseudoporphyria was gray/blue eye color. In order to prevent disfiguring facial scarring, the authors advised to take caution in prescribing naproxen in children with juvenile idiopathic arthritis.

### **Treatment of larva migrans cutanea (creeping eruption): a comparison between albendazole and traditional therapy**

Albanese G, Venturi C, Galbiati G.  
*Int J Dermatol* 2001;40:67-71.

The authors described their experience of 56 cases of larva migrans seen in their clinic in Italy. Larva migrans cutanea is caused by skin contact with soil contaminated with larvae of certain nematodes especially *Ancylostoma braziliense*. The helminth is normally an intestinal parasite in dogs, cats or wild animals. The 56 patients (35 male, 21 female) aged between 2 and 60 years attended their clinic between March 1987 and December 1999. They all had recent trips to resorts at seaside. The rash mainly occurred on the feet (71%). The initial patients ( $n = 13$ , 23%) were treated with cryosurgery alone, which was a painful procedure. Six patients (11%) were treated with oral thiabendazole (25-50 mg/kg/day for 2 days) which caused dizziness and gastrointestinal upset. One patient (2%) had both thiabendazole and cryosurgery. Thirty-six patients (64%) were treated with albendazole (400 mg/day for 3 days) and two of them also had cryosurgery. All patients tolerated albendazole well. Larva migration stopped 24-48 hours after intake and symptomatic improvement occurred promptly.

The authors concluded that although all of the above methods achieved a definite cure, albendazole should be considered the first choice because of a lack of side effect with the present regimen.

### **Once-daily desloratadine improves the signs and symptoms of chronic idiopathic urticaria: a randomized, double-blind, placebo-controlled study**

Ring J, Hein R, Gauger A, Bronsky E, Miller B, the Desloratidine Study Group.  
*Int J Dermatol 2001;40:72-6.*

A multi-centre randomized, double-blind, placebo-controlled study was undertaken to assess the effectiveness and side effects of desloratadine in the treatment of chronic idiopathic urticaria (CIU). One hundred and ninety patients (aged 12-79 years) with CIU for at least six weeks were randomized to treatment group (n=95) or placebo group (n=95). Desloratadine 5 mg or placebo was given daily for six weeks respectively. The patients scored the CIU symptoms while the investigators and patients jointly assessed the therapeutic response and overall CIU severity. Adverse events, discontinuation of medication, laboratory investigations and electrocardiogram findings were evaluated.

Desloratadine was significantly more effective in controlling CIU compared with placebo ( $p < 0.001$ ). The effect was noted after the first dose of desloratadine and maintained throughout the study. The therapeutic response and overall CIU severity were also significantly better in the treatment group. No major adverse event was reported. Three patients in the treatment group and two patients in the placebo group discontinued the study due to an unrelated adverse event. There was no significant change in laboratory and ECG findings.

The authors concluded that desloratadine was persistently effective and safe in treatment of CIU for up to six weeks with an onset of action seen after the first dose.

### **Topical gentian violet for cutaneous infection and nasal carriage with MRSA**

Okana M, Noguchi S, Tabata K, Matsumoto Y.  
*Int J Dermatol 2000;39:942-4.*

The effect of topical gentian violet was prospectively investigated in 28 cases of cutaneous infection and nine cases of nasal carriage with methicillin-resistant *Staphylococcus aureus* (MRSA).

There were 16 males and 21 females (mean age =  $35.3 \pm 33.1$  years). 0.5% gentian violet solution was applied once daily on the skin lesions while a 0.3% solution was scrubbed on the nasal vestibules twice daily in the nasal carriers. Culture swabs were taken from skin or nasal lesions before and after gentian violet treatment,

until MRSA was eradicated. Disinfection was defined as clinical healing and eradication of MRSA for cutaneous infection.

Disinfection took 2-28 days (mean =  $10.6 \pm 7.2$  days). Eradication of the infection cases took 2-28 days (mean =  $9.1 \pm 6.0$  days). For nasal carriers, eradication took 4-28 days (mean =  $15.3 \pm 9.0$  days). No adverse reaction was reported except for purple colour skin staining during the study. The mean minimal inhibitory concentration (MIC) of gentian violet against MRSA was  $0.0225 \pm 0.0096$   $\mu\text{g/mL}$ .

Gentian violet is bacteriostatic and bactericidal to gram-positive bacteria, including staphylococci. Its clinical efficacy against MRSA was demonstrated in this study. Gentian violet is inexpensive and easy to apply. Its use merits further comparative studies.

### **Routine double treatments of superficial basal cell carcinomas using amino-laevulinic acid-based photodynamic therapy**

Haller JC, Cairnduff F, Slack G, et. al.  
*Br J Dermatol 2000;143:1270-4.*

Superficial basal cell carcinomas of the skin (sBCC) often respond poorly to single treatment with aminolaevulinic acid-based photodynamic therapy (ALA-PDT). The long-term complete response rate was around 50%. The poor response may be due to heterogeneous accumulation of the photosensitizer protoporphyrin (PpIX) within the lesions. However, areas of disease poorly sensitized during initial treatment may be capable of accumulating sufficient PpIX with a second application of ALA and a second treatment may improve the response rate.

Twenty-six histologically-confirmed sBCC from six male patients (mean age 75 years, range 45-85) were treated with ALA-PDT, with an interval of seven days between the two treatment sessions. ALA 20% was applied to the lesions which were then illuminated using a Paterson non-laser light source delivering light of  $630 \pm 15$  nm ( $120-134$   $\text{Jcm}^2$ ,  $50-100$   $\text{mWcm}^2$ ). A complete response rate of 100% was observed one month after treatment. The median follow up time was 27 months (range 15-45 months). Only one lesion relapsed at 16 months post-PDT, yielding a recurrence rate of 4%. The authors concluded that routine double treatments with ALA-PDT was an effective approach to the management of sBCC. The cosmetic results were excellent.

### **Treatment of psoriasis with oral liarozole: a dose-ranging study**

Berth-Jones J, Todd G, Hutchinson PE, Thestrup-Pedersen K, Vanhoutte FP.

*Br J Dermatol 2000;143:1170-6.*

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Liarozole is a novel imidazole derivative that inhibits the cytochrome P450-dependent metabolism of retinoic acid. Systemic administration increases tissue levels of this endogenous retinoid. A multicentre, double-blind, placebo-controlled, dose-ranging study was carried out to determine the efficacy of liarozole in the treatment of psoriasis vulgaris. One hundred and eighteen male adults and 21 postmenopausal female patients were randomized to receive placebo or liarozole fumarate in total daily doses of 50, 75 or 150 mg (divided into equal morning and afternoon doses) for 12 weeks. Response was assessed using a 8-point global scale and by the PSAI score. One hundred and sixteen patients completed the study. Only in the 150 mg group was the response rate significantly better than the placebo both in the 8-point scale (38% with  $\geq 70\%$  improvement) and in the PSAI score (drop from 15.8 to 8.8) .

Liarozole was well tolerated and only five patients stopped the treatment because of adverse events. Mucocutaneous retinoid effects were generally infrequent and mild. The short half-life of liarozole (approximately eight hours) allows rapid restoration of normal retinoid metabolism when treatment is discontinued. The data confirmed that liarozole was an effective treatment for psoriasis and the lowest effective dose was 75 mg twice daily.

### **Anosacral cutaneous amyloidosis: a study of 10 Chinese cases**

Wang WJ, Huang CY, Chang YT, Wong CK.

*Br J Dermatol 2000;143:1266-9.*

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Anosacral cutaneous amyloidosis is a rare type of primary cutaneous amyloidosis, first reported in Japanese patients. Only 10 such cases (2 female and 8 male) were found in Taiwan over the past 27 years. Their age of onset ranged from 22-76 years old (median 60 years). The clinical picture showed well demarcated brownish patches or plaques fanning out in lines from the anus to the sacral region. Severe cases showed dark brown colour and obvious hyperkeratosis. Most patients also have lichenoid/macular amyloidosis over the skin elsewhere. All patients experienced pruritus. None of them had a traceable family history. All cases showed hyperkeratosis, acanthosis, increased melanin in the basal layer and pigment incontinence in the papillary dermis. Amyloid deposits were demonstrated in the papillary dermis.

There seemed to be a racial difference accounting for the disease as it had not been found in Western literature. Half of the patients developed the disease before the age of 60 years, in contrast to the belief that this condition was due to senile change. Apoptosis had been suggested to be the initial event causing amyloid deposition. There was no effective treatment. Topical corticosteroids might alleviate the symptoms and signs of some patients.

### **Crusted (Norwegian) scabies in two old-age home residents**

Chan LY, Tang WYM, Ho HHF, Lo KK.

*HKMJ 2000;6:428-30.*

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Crusted scabies alternatively known as Norwegian scabies is a highly infectious disease that may be spread by close or sexual contacts. It has been estimated that the number of scabetic mites per infected persons can be up to a million *Sarcoptes scabies hominis*.

The authors reported two cases of crusted scabies affecting two elderly patients who were both residents in old age homes. They presented with hyperkeratotic crusted lesions which were mistakenly diagnosed as eczema initially. The correct diagnosis of crusted scabies was later confirmed by performing microscopy on the scraping of skin lesions which revealed the mites. An early diagnosis depends on a high index of suspicion of crusted scabies on immunosuppressed patients.

Treatment of crusted scabies involved repeated application of scabicide every 4-7 days. Benzyl benzoate emulsion, permethrin, malathion and 1% gamma benzene hexachloride are all effective topical treatment modalities. Repeated clinical evaluation by skin scrapings is essential to monitor the disease. Ivermectin, an oral therapy, has been suggested to be effective in the treatment of crusted scabies. A delay in making a diagnosis of crusted scabies may result in outbreaks of the disease especially in an old age home setting.