

## ABSTRACTS FROM CURRENT LITERATURE

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### PYODERMA GANGRENOSUM

Pyoderma gangrenosum was first described by Brunsting et al in 1931. Although its exact aetiopathogenesis still evades investigators, a proportion of cases do have abnormalities of the immune system including systemic diseases like ADD. Numerous treatments, both topical and systemic have been tried with varying outcomes. The followings are a few abstracts from current literature dealing mainly with therapy.

### EFFICACY OF HUMAN INTRAVENOUS IMMUNE GLOBULIN IN PYODERMA GANGRENOSUM

Gupta A K, Shear NH, Saunder DN. *J Am Acad Dermatol* 1995;32 (1): 140-2.

The authors report a case of a 35-year old woman who had repeated episodes of Pyoderma Gangrenosum (PG) but in whom no underlying cause could be identified. She was variously treated with Prednisolone, Dapsone, Cyclosporine and Intravenous methyl prednisolone with temporary response and early relapse. Finally she was treated with 0.4 gm/kg/day of human intravenous immune globulin (IVIG) for five days while therapy with cyclosporine and prednisolone continued. The ulcer healed remarkably within two weeks and a second course of IVIG 1gm/kg/day was instituted to ensure remission. Cyclosporine and prednisolone were gradually tapered off. There was no recurrence of the PG in the next eight months. The authors discuss the literature on use of immunoglobulins including dosages and probable modes of action.

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### TREATMENT OF PYODERMA GANGRENOSUM WITH COLCHICINE

Paolini O, Hebutrue X, Flory P, Charles F, Rampal P. *Lancet* 1995; 345 (8956): 1057-8.

The authors report two cases of Pyoderma Gangrenosum (PG) associated with Crohn's disease successfully treated with Colchicine. Both patients were diagnosed as suffering from Crohn's disease and had developed lesions of PG on their lower legs. These had not responded to drugs like clofazimine and had benefitted only marginally from Prednisolone (20 mg/day). Colchicine (1 mg/day) led to complete healing within two and three months respectively. There was no relapse during follow up for twenty two and five months respectively. The probable mode of action of colchicine as being anti inflammatory through its inhibition of synthesis of neutrophil microtubules is discussed.

### VITILIGO THERAPY

Vitiligo is a pigmentary disorder of the skin of autoimmune etiology. Various therapies including photochemotherapy, topical steroids, surgical modalities etc. have produced varying results. The following are abstracts from current literature addressing some of these issues.

### HYDROALCOHOLIC HUMAN PLACENTAL EXTRACT: SKIN PIGMENTING ACTIVITY AND GROSS CHEMICAL COMPOSITION.

Pal P, Roy R, Dutta PK, Dutta AK, Biswas B, Bhandra R. *Int J Dermatol* 1995; 34(1):61-6.

Aqueous or hydroalcoholic extracts of human placenta of ill defined composition have been used therapeutically for vitiligo. The authors have developed a similar hydroalcoholic placental extract with pigmenting activity based on experimental therapies. Its chemical analysis was the main aim of the study. The experiment was carried out using twenty drops of the extract or the vehicle (control) for topical application on the areola of immature male lice daily for sixty days. Results at the end of the study period showed clear pigmentation and hypertrophy to varying degrees. The authors discuss the role of glycosphingolipids and endothelin present in placental extract in the induction of melanocytes and in melanocyte growth respectively.

### CLINICAL STUDY OF A NEW PREPARATION OF 8-METHOXYPSORALEN IN PHOTOCHEMOTHERAPY

el-Mofty-AM, el-Sawalhy-H, el-Mofty-M. *Int J Dermatol* 1994; 33 (8): 588-92

Oral 8-methoxy psoralen (8-MOP) is the drug of choice in photochemotherapy of vitiligo and psoriasis. The aim of this trial was to produce a new preparation of the drug, which would overcome the problems of the older preparations. Therefore a new ultra micronise form of the drug in 10 mg capsules was tried in an open trial. The trial included 53 patients (15 psoriasis, 26 vitiligo, 12 tinea versicolor). Light testing showed that the strongest erythema appeared 30 minutes after ingesting the capsules and so patients were exposed to UVA after this period. Thirteen of the 15 psoriasis patients (87%) went into remission after 30 sittings. Twenty two of the

26 patients of vitiligo (85%) showed acceptable pigmentation after 70 sittings. The 10 patients with tinea versicolor (100%) showed complete repigmentation after 12 sittings. The therapeutic effective dose was found to be 0.25mg/kg. The new preparation proved to be very well tolerated by the patients, causing no epigastric discomfort, nausea, or vomiting, often significant limiting factors in the use of the older preparatons. It was also well tolerated by patients known to be sensitive to oral or topical 8-MOP therapy.

### EFFECT OF PROLONGED TREATMENT WITH LEVAMISOLE ON VITILIGO WITH LIMITED AND SLOW SPREADING DISEASE

Pasricha JS, Khera V. *Int J Dermatol* 1994; 33 (8):584-7.

For treatment of Vitiligo to be effective, it is important that apart from trying to bring about repigmentation, any progression of disease also be halted. The authors evaluated the efficacy of Levamisole in halting disease progression in 64 patients with limited and slow-spreading vitiligo. All patients were given 150 mg of oral levamisole on two consecutive days every week for periods varying from 4-48 months. In 14 patients levamisole was used alone, in 12 patients it was combined with 0.05% clobetasol propionate topically and in 38 it was combined with 0.1% flucinolone acetonide. In 34 of the 36 patients (94%) disease could be arrested in 2-4 months. There were minimal side effects from levamisole. The authors conclude that levamisole is a safe and fairly effective remedy for controlling the activity of disease in limited and slow spreading vitiligo.

## URTICARIA AND THERAPY

### EFFECT OF THE H<sub>2</sub>-ANTAGONIST CIMETIDINE ON THE PHARMAKOKINETICS AND PHARMACODYNAMICS OF H<sub>1</sub>-ANTAGONISTS HYDROXYZINE AND CETIRIZINE IN PATIENTS WITH CHRONIC URTICARIA

Simons FE, Sussman GL, Simons KJ. *Allergy Clin Immunol* 1995; 95 (3): 685-93.

The authors describe a randomised, double blind, parallel group study in 16 patients with chronic urticaria to investigate the pharmacokinetics and suppressive effects on the histamine induced wheal and flare of a single dose of hydroxyzine 25 mg or cetirizine 10 mg, given before and after treatment with cimetidine 600 mg every 12 hours for 10 days. The authors conclude from the results that co-administration of hydroxyzine with cimetidine resulted in significantly increased serum hydroxyzine levels and increased wheal and flare suppression, thus confirming the rationale for a trial of concomitant administration of these drugs in some patients with chronic urticaria unresponsive to treatment with H<sub>1</sub> antagonists alone. However no rationale for co administration of cetirizine and cimetidine was found.

## DERMATOPHYTOSES

### CLINICAL EXPERIENCE WITH SHORT SCHEDULES OF ITRACONAZOLE IN THE TREATMENT OF TINEA CORPORIS AND/OR TINEA CRURIS

Parent D, Decroix J, Heenen M. *Dermatology* 1994; 189 (4): 378-81.

In recent years the epidemiology of

dermatophytoses has been changing and so broad spectrum antifungals such as Itraconazole have become particularly useful. The aim of this study was to compare the efficacy and tolerability of a shorter treatment regimen, using a higher dose of Itraconazole, with a standard Itraconazole regimen in the treatment of tinea corporis/cruris. In an open study a comparison was made between 200 mg of oral itraconazole for 7 days with 100 mg of oral itraconazole for 15 days in 153 patients with tinea corporis/cruris. At follow up all patients in both groups were clinically cured or markedly improved. However mycological cures were greater in the 7-day treatment group (90%) and the onset of clinical and mycological cure was faster in this group. The authors conclude that 200 mg daily of itraconazole for 7 days offers a short, convenient and effective treatment option for tinea corporis/cruris.

### THERAPY WITH CICLOPIROX LACQUER OF ONYCHOMYCOSES CAUSED BY MOLDS

Ulbricht H, Worz K. *Mycoses* 1994; 37 (Suppl 1): 97-100.

In a study involving 60 patients suffering from onychomycoses produced by moulds (culture proven), the authors set out to establish the efficacy and tolerability of ciclopirox nail lacquer (8%) in its treatment. All patients were treated for a maximum of 6 months at the end of which KOH examination and cultures were carried out. Mycological cure was achieved in 85% as established by cKOH examination and in 90% as shown by culture. No side effects were reported. Thus this local therapy for onychomycoses caused by molds proved effective and tolerable.

## **BIOAVAILABILITY OF FLUCONAZOLE IN THE SKIN AFTER ORAL MEDICATION**

Wildfeuer A, Faergemann J, Laufen H, Pfaff G, Zimmermann T, Seidi HP, Lach P. *Mycoses* 1989; 3793 (4): 127-30.

Fluconazole is an antimycotic drug which until now has been used mostly in the systemic therapy of yeast infections. The authors have demonstrated the presence of the drug in various skin structures. 50 mg of Fluconazole per day was given for 12 days to healthy volunteers and mean drug concentrations were measured in serum, sweat, dermis-epidermis, and stratum corneum. It was revealed that 4 hours after the last dose the anti-mycotic attains 40-fold higher concentration in the stratum corneum than in the serum. Also fluconazole was shown to be eliminated 2-3 times more slowly than from serum or plasma.

## **ITRACONAZOLE VERSUS GRISEOFULVIN IN THE TREATMENT OF TINEA CAPITIS: A DOUBLE BLIND RANDOMISED STUDY IN CHILDREN**

Lopez Gomez S, Del Palacio A, Van Cutsem J, Soledad Cuetara M, Iglesias L, Rodrigues Noriega A. *Int J Dermatol* 1994; 33 (10); 743-7.

34 children and 1 adult with clinical signs and symptoms of tinea capitis and with positive culture and microscopy for dermatophytes were included in a double blind comparison between Itraconazole 100 mg daily and ultramicrosized Griseofulvin 500 mg daily. Both drugs were given for six consecutive weeks. The final evaluation was made 8 weeks after the end of treatment to allow hairs to regrow. 88% cure was achieved in both groups, however, 2 of the original 17 patients treated with griseofulvin had to

discontinue therapy because of vomiting. None of the Itraconazole-treated children suffered any side effects. Therefore the authors have shown that Itraconazole is the first azole antifungal that matches griseofulvin in the treatment of tinea capitis in children. The drug also seems to be better tolerated.

## **ALOPECIA AREATA**

### **INTRALESIONAL TRIAMCINOLONE ACETONIDE IN ALOPECIA AREATA AMONGST 62 SAUDI ARABS**

Kubeyinje EP. *East Afr Med J* 1994; 71 (10):674-5.

Evaluation of 62 Saudi Arabs with alopecia areata an monthly intralesional injection of triamcinolone acetonide showed complete regrowth on 40 (63) patients at 4 months. Regrowth was likely in young adults with few lesions (less than 5 patches), lesions of short duration (less than 1 month), patches less than 3 cm in diameter. Regrowth was poor when alopecia was associated with atopy and with mongolism. Side effects of treatment were minimal and the drug was well tolerated.

### **PREVALENCE OF THYROID DISEASE IN PATIENTS WITH ALOPECIA AREATA**

Puavilai S, Puavilai G, Charuwichitratana S, Sakuntabhai A, Sriprachya Anunt S. *Int J Dermatol* 1994; 33 (9): 632-3.

The prevalence of thyroid disease in patients with alopecia areata has previously been reported varying from 0 to 28%. The authors studied its prevalence in 152 consecutive patients with alopecia areata who presented to the dermatology clinic. Among the 152 patients, aged 10-59 years, 4 cases

had a small simple goitre (2.6%). Microsomal antibodies were detected in 7 other patients (4.6%) with titres ranging from 1:100 to 1:1600. None of these patients had signs or symptoms of thyroid disease. Five cases (3.3%) of the control group had positive microsomal antibodies with titres ranging from 1:100 to 1:400. The authors thus conclude that among 152 patients with alopecia areata, 4.6% of patients had microsomal antibodies and 2.6% had a small simple goitre. Thus the prevalence of thyroid disease among these patients was 7.2%. The prevalence of positive microsomal antibodies in 4.6% of the patients was not statistically different from that of the control group.

### **DIPHENCYPRONE IS NOT DETECTABLE IN SERUM OR URINE FOLLOWING TOPICAL APPLICATION**

Ostlere LS, Harris DW, Wood M, Rustin MH. *Br J Dermatol* 1994; 131 (5): 735-6.

Diphencyprone is a potent contact sensitizer in widespread use for treatment of alopecia areata. It is currently not known whether this compound is absorbed following topical application. This is important, since little is known regarding potential toxicity. The authors analysed serum and urine samples following application of at least 0.5 ml of a 1% solution of diphencyprone to the scalp of patients under treatment of alopecia areata. Serum samples were obtained over 8 hours following treatment and 24-hour urine collections were performed. Blood and/or urine samples were obtained from a total of 18 subjects. Diphencyprone was not detected in any sample of serum or urine from the subjects. These data suggest that diphencyprone is not absorbed following application to the skin.

### **LICHEN PLANUS**

#### **CYCLOSPORINE A, AN ALTERNATIVE TO THE ORAL LICHEN PLANUS TREATMENT**

Lopez Lopez J, Rosello Liabres X. *Bull Group Int Rech Sci Stomatol Odontol* 1995; 38(1-2):33-8.

The authors conducted a double blind study on two groups of patients with long standing oral lichen planus which had proven resistant to treatment. Group A was given mouthwash with 5 ml of 10% Cyclosporine A solution in olive oil for five minutes to be done three times a days and group B was given 1% aqueous solution of triamcinolone acetonide. Ninety percent of patients in group A improved considerably as compared to 60% in group B. The onset of action of cyclosporine was also faster. The authors recommend that cyclosporine can be an alternative to conventional treatments in the acute phase of oral lichen planus although it cannot be considered as a first option drug because of the high cost of treatment.

#### **RESOLUTION OF LICHEN PLANUS FOLLOWING REMOVAL OF AMALGAM RESTORATIONS IN PATIENTS WITH PROVEN ALLERGY TO MERCURY SALTS: A PILOT STUDY**

Smart ER, Macleod RI, Lawrence CM. *Br Dent J* 1995; 178(3):108-12.

Thirteen patients with symptomatic oral lichen planus had been shown to be allergic to ammoniated mercuric chloride by patch testing. Replacement of amalgam restorations in these patients effected an improvement in all but one case. In some cases the resolution of symptoms was dramatic following the replacement of one or two fillings. The authors feel that the removal of all amalgam fillings

need not be necessary except in the most intractable cases.

### **CYCLOSPORINE A IN AN ADHESIVE BASE FOR THE TREATMENT OF RECALCITRANT ORAL LICHEN PLANUS. AN OPEN TRIAL**

Voute AB, Schulten EA, Langendijk PN, Nieboer C, vander Wall I. *Oral Surg Oral Med Oral Pathol* 1994; 78 (4): 437-41.

The study included nine symptomatic patients with histopathologically and immunofluorescence proven oral lichen planus. They had all been previously

unsuccessfully treated with topical or systemic steroids. Topical cyclosporine A 0.025% was given to be applied four times a day. The minimum follow up period was four months. Four patients showed partial response to treatment with respect to signs and symptoms. None of the patients had complete remission. Five patients showed no response or even complained of an increase in symptoms. No adverse effects of the drug were noted during follow up. Although the number of patients has been small, the results of this study indicate that topical cyclosporine offers no distinct advantage over topical steroids in the treatment of oral lichen planus.

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