ABSTRACTS FROM CURRENT LITERATURE

Lesion pattern of psoriasis of the feet : its relationship to the normal weight bearing free curve, Corn BM, Lemont H and Witkowski JA : Internat J Dermatol, 1987; 26 : 115-116.

The appearance of psoriatic lesions on the uninvolved skin of psoriatic patients as a result of trauma was first described by Koebner in 1877. The authors report a 46-year-old female who had psoriasis involving the trunk, extensor surfaces of forearms and knees. She presented with bilaterally symmetrical, sharply circumscribed, red scaly patches on the plantar surface of the feet. The lesions on the soles appeared after the patient had begun to play tennis. The lesions peculiarly used to get exacerbated during the months of athletic activity and improve during the periods when she stopped playing. Resolution of the lesions followed the use of a foot orthosis which was designed to diminish the normal vertical and shearing force during ambulation. The present case shows that psoriasis of the soles, usually involves the heels, lateral border of the foot and the metatarsal area which is the normal weight-bearing pattern of the foot.

K Anitha

Bilateral Koebner phenomenon in lichen sclerosus et atrophicus, Ronnen M, Shuster S, Kahana M et al : Internat J Dermatol, 1987; 26 : 117-118.

Lichen sclerosus et atrophicus is an uncommon disorder that tends to affect females more than men, genitalia being the commonest site. The occurrence of Koebner phenomenon in this disease has been described. It is thought to be due to some autoimmune mechanisms. The authors report a 48-year-old female who developed bilaterally symmetric lesions on the shoulders that followed the lines of her brassiere's shoulder straps. The lesions were 6×3.5 cm in size, distributed in a linear fashion characterised by thinned, slightly depressed and atrophic epidermis surrounded by a zone of gray-white thickened and wrinkled skin. Histological findings were consistent with lichen sclerosus et atrophicus. Subsequent examination revealed lichen sclerosus et atrophicus of the vulva which was confirmed by a biopsy. The present case shows that lichen sclerosus et atrophicus can occur at unusual sites as a manifestation of isomorphic phenomenon which may act as a clue in the detection of a silent primary focus.

K Anitha

Topical mupirocin versus oral erythromycin in the treatment of primary and secondary skin infections, Gratton D : Internat J Dermatol, 1987; 26 : 472-473.

Mupirocin, a metabolite of *Pseudomonas fluorescens*, is an antibiotic effective against a broad range of Gram-positive bacteria especially the pathogens that cause primary and secondary skin infections. The authors compared the efficacy of 2% mupirocin skin ointment with oral erythromycin in treating cutaneous bacterial infections. Sixty patients with primary and secondary skin infections were randomly divided into two equal treatment groups. One group applied topical mupirocin ointment three times daily for 7 days and the other group received erythromycin 250 mg four times daily for 7 days. *Staphylococcus aureus* was identified as the infecting organism in about one half of the patients in both the treatment groups. The rate of clinical failure was six-fold lower in the

mupirocin-treated group than it was in the erythromycin-treated group i.e. 3% versus 18% respectively. There were no side effects with mupirocin, but 8 of 29 erythromycin treated patients experienced side effects, the most common being gastro-intestinal disturbances.

K Pavithran

Dermatologic disorders in patients with thymoma, Gibson LE and Muller SA : Acta Dermato-Venereol (Stockh), 1987; 67 : 351-356.

The thymus plays an important role in the immunologic status of an individual and its disorder may be associated with autoimmune disorders like myasthenia gravis, hypogammaglobulinemia and pure red cell aplasia. A review of patients with thymoma was undertaken by the authors with regard to other dermatologic conditions. Of the 172 patients with thymoma, 34 had skin findings, the skin disorder being present in 19 of the 34 patients at the time of diagnosis of thymoma. The cutaneous findings included tinea corporis (6), onychomycosis (5), tinea pedis (3), oral yeast (5), chronic muco-cutaneous candidiasis (1), pemphigus (2), lichen planus (2), herpes zoster (5), basal cell carcinoma (2), malignant melanoma (1), psoriasis (1), multiple trunkal seborrhoeic keratoses(3), chronic aphthous ulcers (2). Related autoimmune disorders included polymyositis in 1, sclerodermatomyositis in 1 and polyarthritis with cyclic oedema in 1. Patients with skin disorders were no different from the patients without these disorders with regard to thymoma histology, sex, age or the presence of myasthenia gravis. Thymectomy did not alter the clinical course with respect to the cutaneous disease.

K Pavithran

Psoriasiform drug eruption due to glibenclamide, Goh CL : Aust J Dermatol, 1987; 28 : 30-32.

Many drugs are known either to exacerbate psoriasis or to induce psoriasiform skin lesions. These include beta-blockers, non-steroidal anti-inflammatory agents, lithium, clonidine etc. The author reports a 49-year-old Indian female who developed psoriasiform skin lesions following therapy with glybenclamide, an oral hypoglycemic agent. The condition did not improve with topical tar treatment but cleared within 6 weeks after withdrawal of glybenclamide. The authors conclude that glybenclamide should also be included in the list of drugs which cause psoriasiform eruptions.

K Pavithran

Granulomatous vasculitis as a complication of potassium iodide treatment for Sweet's syndrome, Eeckhout E, Willemsmen M, Deconinck A et al : Acta Dermato-Venereol (Stockh), 1987; 67 : 362-364.

Potassium iodide is widely used for the treatment of many erythematous dermatoses. The authors report a rare but serious complication of potassium iodide therapy. A 37-year-old female who was treated with this drug for Sweet's syndrome developed granulomatous vasculitis with involvement of the skin, kidney and eyes. In the eye, she developed bilateral papillitis. Histopathological study of the skin lesion revealed leucocytoclastic vasculitis. She responded well to systemic corticosteroid therapy. This case illustrates the unpredictable outcome with the use of potassium iodide.

K Pavithran

Improvement of chronic neurotic excoriations with oral doxepin therapy, Harris BA, Sherertz EF and Flowers FP: Internat J Dermatol, 1987; 26 : 541-543.

Neurotic excoriations are self-inflicted lesions at accessible sites seen in the absence of primary skin disease. The mood of many of these patients is often depressed or dysphoric. Topical antipruritic agents, corticosteroids and systemic antihis-

tamines are only of limited value in this disorder. The authors tried doxepin, a tricyclic antidepressant with potent antihistaminic effects in two cases of chronic neurotic excoriations. It was used in oral doses of 30 to 75 mg daily. Both patients improved in their mood and the severity of skin lesions in a relatively short time. Whether doxepin was helpful in these patients via a central effect or an antihistamine effect is not clear. An adjuvant psychotherapy also is useful when these patients are subjected to doxepin therapy.

K Pavithran

Experience with a gluten-free diet in the treatment of linear IgA disease, Leonard JN, Griffiths CEM and Powles AV: Acta Dermato-Venereol, 1987; 67 : 145-148.

Authors studied six patients (three males and three females) with linear IgA disease to detect whether the skin eruption was gluten dependent. The average age among them was 51 years. Prior to the study, the diagnosis was confirmed by direct immunofluorescence test and minimum drug requirement for control of rash. Gluten-free diet was given for an average period of 33 months. None of the patients responded to the gluten-free diet. Four of the 6 patients showed no significant alteration in their drug requirements. The remaining 2 patients showed a decrease in the drug requirement but there was no change when gluten was given again indicating that they were going into a spontaneous remission. Thus,there is no evidence to suggest that the rash of linear IgA dermatosis is caused by gluten and a gluten-free diet is indicated for its treatment.

K Sobhanakumari

Transplantation of human melanocytes, Lerner AB, Halaban B, Klaus SN et al : J Invest Dermatol, 1987; 89 : 219-224.

Recent advances in the culturing of pigment cells from human beings have made it possible to begin the transplantation of autologous melanocytes into areas of skin that are hypopigmented. In a patient with piebaldism, the authors were able to take pigment cells from a shave biopsy of the normally pigmented skin, expand the cells in culture and return them to an area devoid of pigment cells and get a perfect take. To grow the cells in culture, the authors used 12-0-tetradecanoyl-phorbol 13 acetate (TPA), as well as cholera toxin and isobutyl-methyl xanthine. The normal skin biopsy specimen was incubated in 0.25% trypsin solution for 2 hours at 2°C. The dissociated cells from growth medium were transferred to 25 CM^2 flasks containing TIC medium. During the following days, melanocytes attached to the substratum while keratinocytes stayed around and detached. Melanocyte population expanded to approximately 2×10^6 cells within 3 weeks. Melanocytes were then detached from the flask, collected in buffered saline solution and injected into the suction blisters made in the depigmented areas after aspirating the blister fluid. After 4 weeks, the site had received 5×10^5 cells and had a fine strippling of pigmentation and after 6 months there was excellent repigmentation. There was no evidence of pigment spread from the pigmented transplant patch. The procedure of using autologous pigment cell cultures opens the door for further advances in the treatment of patients with depigmented skin lesions like vitiligo.

N Sasi

Neurologic manifestations of AIDS, Mc Arthur JC : Medicine, 1987; 66 : 407-437.

The human immunodeficiency virus (HIV), the causative agent of AIDS has neurotropic properties. The nervous system invasion occurs at an early stage and the frequency and diversity of neurologic disorders associated with HIV occur before the development of opportunistic infections, Kaposi's sarcoma and frank AIDS.

One of the most frequent manifestations is AIDS-related dementia. Despite the evidence linking unchecked viral replication within the brain and progressive dementia, the basic pathogenetic mechanisms remain obscure. Other neurological complications include myelopathies, peripheral neuropathies, opportunistic CNS infections and CNS neoplasms. Many of these disorders are novel and incompletely characterised. While treatment is available for several of these conditions, it is generally not curative, and is often poorly tolerated because of adverse effects. The prospects of an epidemic of AIDS-related dementia are ominous, particularly as antiviral therapy alone is unlikely to either eradicate the virus or restore brain function.

Jayakar Thomas

Effect of acupuncture on experimentally induced itch, Lundeberg T, Bondesson L and Thomas M : Brit J Dermatol, 1987; 117 : 771-777.

The effect of acupuncture on experimentally induced itch was studied in 10 healthy volunteers. Itching was induced by intradermal injections of histamine on the upper arm. Placebo-acupuncture, acupuncture and electro-acupuncture were applied over the injection site, proximal to the injection site (in the same dermatome) or extra-segmentally (ipsilateral to the injected arm) for a period of five minutes following induction of itch. In addition, the effect of a 5-minute period and a 20-minute period of stimulation of the skin area prior to the induction of itch were studied. The same periods of stimulation were also applied to extra-segmental points prior to the induction of itch on the arm. Acupuncture and electro-acupuncture significantly reduced subjective itch intensity when applied intra-segmentally. No significant effects were obtained when stimulation was applied extra-segmentally. The authors suggest that acupuncture or electroacupuncture could be tried in clinical conditions associated with pruritus.

Jayakar Thomas

Dermatome shaving of psoriasis, Elberg JJ and Brandrup F : Brit J Dermatol, 1987; 117 : 745-750.

Dermatome shaving was performed in 20 patients with chronic recalcitrant plaque psoriasis. The level of shaving was just beneath the superficial dermal vascular plexus. At the most recent follow-up, a normal skin was found in 15 patients. In four patients the skin appeared atrophic, and in one patient delayed healing had led to disfiguring scars. Alteration in the skin colour was noted as increased pigmentation in two patients and hypopigmentation in 10 patients. One patient with concomitant vitiligo developed complete depigmentation in the shaved area. The amount of hair and sensation remained unchanged. Post-operative pain caused considerable discomfort in seven patients. In the final assessment, 14 patients were satisfied while six were not, mainly due to recurrences. The basis of treatment appears to be the reverse Koebner reactions. With the present knowledge, the authors consider that although a general recommendation of surgical treatment for psoriasis would be hazardous, shaving may offer a feasible alternative treatment for recalcitrant plaques of limited extent.

Jayakar Thomas

The role of sweat in the pharmacokinetics of ketoconazole and griseofulvin, Hatziz J, Tosca A, Varelzidis A et al : Brit J Dermatol, 1987; 117 : 797-798.

The authors draw the readers' attention to the fact that griseofulvin and ketoconazole have been shown to be transferred by sweat to the surface of the skin and this effect is considered to be very important in the treatment with these

drugs. However, they have observed that due to sweat duct occlusion, hypohidrosis occurs over the diseased skin in dermatophytoses, candidiasis and pityriasis versicolor. Based on these observations neither ketoconazole nor griseofulvin reaches fungal skin infections directly via the sweat. The possibility of indirect transfer of these drugs to fungal lesions by sweat from adjacent normal skin and contact with apposing skin surfaces and clothes cannot be excluded, though the contribution of these drugs reaching the site of infection indirectly cannot be estimated accurately. The authors highlight that griseofulvin and ketoconazole might well protect the normal skin surface from spread of infection, and during summer months excretion in sweat might be a significant cause of drug loss.

Jayakar Thomas

Increased risk of cancer in the Peutz-Jeghers syndrome, Giardiello FM, Welsh SB, Hamilton SR et al : New Eng J Med, 1987; 316 : 1511-1514.

Peutz-Jeghers syndrome is an autosomal dominant disease characterised by hamartomatous polyps in the gastro-intestinal tract and by muco-cutaneous melanin pigmentation. The hamartomatous polyps were thought to have little potential for malignancy, and the disease was believed to have a relatively benign course. The authors have investigated 31 patients with Peutz-Jeghers syndrome and found that cancer developed in 15 of them (gastro-intestinal carcinomas in 4, non-gastro-intestinal carcinomas in 10, and multiple myeloma in 1). It is noteworthy that the cancers were diagnosed when the patients were relatively young. According to relative-risk analysis, the observed development of cancer in the patients with the syndrome was 18 times greater than expected in the general population. The results suggest that patients with Peutz-Jeghers syndrome, which is generally thought to be a relatively benign disease, have an increased risk of cancer both within and outside the gastro-intestinal tract. The authors recommend attention to routine breast and gynaecological examination and screening for pancreatic cancer. Physicians should consider the possibility of cancer in symptomatic young patients with the Peutz-Jeghers syndrome.

Jayakar Thomas

Autoantibody-mediated acquired deficiency of Cl inhibitor, Alsenz J, Bork K and Loos M : New Eng J Med, 1987; 316 : 1360-1366.

Three forms of deficiency of the inhibitor of the first component of complement (Cl inhibitor) with angioedema have been recognized; two forms are hereditary and one is acquired. The predominant form (hereditary angioedema type 1, common form) is characterised by decreased levels of Cl-inhibitor protein. The variant form (hereditary angioedema type 2) have normal or elevated levels of Cl-inhibitor protein but synthesize functionally deficient Cl-inhibitor species. The third form, an acquired form associated with lympho-proliferative diseases is characterised by low levels or absence of Cl-inhibitor. The authors describe a fourth form (also acquired) of angioedema wherein patients were found to have IgGl autoantibodies against Cl-inhibitor. These patients had no associated diseases. The authors opine that these cases of acquired Cl-inhibitor deficiency resulted from a blockade of Cl-inhibitor function by the anti-Cl-inhibitor antibodies. As in other forms of Cl-inhibitor deficiency, the unopposed activation of the complement system led to angioedema.

Jayakar Thomas

Low risk of herpes simplex virus infection in neonates exposed to the virus at the time of vaginal delivery to mothers with recurrent genital herpes simplex virus infections, Prober CG, Sullender WM, Yasukawa LL et al : New Eng J Med, 1987; 316 : 240-244.

The risk of herpes simplex virus (HSV) infections in neonates exposed to HSV at the time of vaginal delivery to mothers with a history of recurrent genital HSV infections was studied. None of 34 infants exposed to HSV type 2 acquired an HSV infection. Cord blood or blood obtained during the first two weeks of life was available from 33 of the 34 exposed, uninfected neonates. All 33 of the samples possessed demonstrable neutralizing antibody to HSV type 2, and 79% had titres above 1:20. These results were compared with those in a group of previously studied neonates with HSV infections; the latter infants were significantly less likely at the onset of symptoms to have demonstrable neutralising antibody to HSV type 2 or to have titres above 1:20. Theoretically there are several reasons to expect a much lower attack rate for neonatal herpes after delivery to a mother with a recurrent HSV infection. First, the cervix is not frequently involved with recurrent infection, whereas it is commonly involved in primary infection. Second, HSV is present in the genital tract in lower titres and for a shorter period during a recurrent infection than during a primary infection. For these reasons the neonate is less likely to be exposed to the virus during a recurrent HSV infection, despite vaginal delivery. In addition, neonates born to mothers with a recurrent HSV infection are likely to have HSV antibody at birth acquired transplacentally, whereas those born to mothers with a primary infection may not. The authors weigh this low risk against the maternal and neonatal morbidity and increased cost of childbirth associated with caesarean delivery. They conclude that if a woman is experiencing her first attack of genital HSV infection around the time of delivery, the risk that her neonate will acquire an HSV infection is likely to be substantially higher. In this circumstance a caesarean delivery is probably prudent.

Jayakar Thomas

A herpetic hickey, Del Rosario NC, Blair E and Rickman L : New Eng J Med, 1987; 317 : 54-55.

Direct inoculation of herpes simplex virus is well known to occur from genital or oral areas to other sites. Herpes simplex infection has also been found to be transmissible through breast milk, saliva and tears of persons with active lesions or with inapparent infection. The authors describe a case of primary herpes simplex infection in a 22-year-old healthy man on the side of the neck acquired from a hickey (or "love bite") given by his girl friend, who had active fever blisters.

Jayakar Thomas

The use of ketoconazole as an inhibitor of steroid production, Sonino N : New Eng J Med, 1987; 317 : 812-818.

Ketoconazole, an imidazole derivative, is an oral antimycotic agent with broad-spectrum activity and low toxicity. Studies have shown that ketoconazole acts as a steroid inhibitor. Hence, it is a new therapeutic tool in the management of conditions in which it is benefecial to suppress gonadal or adrenal hormone production, such as prostate cancer and Cushing's syndrome, respectively. Further studies will show whether ketoconazole can be of value in the management of conditions of androgen excess, such as acne vulgaris, hirsutism and precocious puberty.

Jayakar Thomas

Diagnosis of pseudoxanthoma elasticum by scar biopsy in patients without characteristic skin lesions, Lebwohl M, Phelps RG, Yannuzzi L et al : New Eng J Med, 1987; 317 : 347-350.

Pseudoxanthoma elasticum is a disorder of connective tissue that is associated with numerous systemic complications, including atherosclerosis, gastro-intestinal bleeding, angioid streaks in the ocular fundus and blindness. Diagnosis of the disease is important because many of its complications can be prevented and genetic counseling can be offered to family members of affected patients. Ten patients with angioid streaks without clinically apparent skin or mucosal lesions were evaluated by biopsy from flexural skin and also from the middle portions of old scars in all ten patients. The biopsy specimens were compared with those from unaffected controls. In 6 of the 10 patients, scar biopsies showed fragmentation and clumping of elastic fibres in the deep dermis. Three patients also had the histopathologic features of pseudoxanthoma elasticum in the biopsy specimens of flexural skin that appeared to be normal. After a diagnosis of pseudoxanthoma elasticum was made on the basis of the biopsy results, it was noted in 3 patients that one of the relatives had skin lesions that were more typical of the disease. The authors conclude that biopsy of scars may be useful when pseudoxanthoma elasticum is suspected despite the absence of typical skin lesions.

Jayakar Thomas