Further, a discussion on the psychological aspects of the cutaneous and cosmetic surgery would have been welcomed.

The author aims this book to provide the reader with an in-depth understanding of the principles pertaining to cutaneous surgery and mastering the basic skills involved in cutaneous surgery. This goal is accomplished in a straight forward, understandable manner. The book is recommended as an introductory primer for the aspiring dermatologists and cutaneous surgeons.

Pramod K Nigam
Raipur

ABSTRACTS FROM CURRENT LITERATURE

A quantitative assessment of Langerhans cells in oral mucosal lichen planus and leukoplakia, Rich AM and Reade PC : Brit J Dermatol, 1989; 120 : 223-228.

Since lichen planus is believed to be mediated by immune mechanisms, the authors studied the numbers of Langerhans cells in oral lichen planus and compared it with a non-immune-mediated disorder, leukoplakia and with normal oral mucosa. Mucosal biopsies were obtained from 42 patients (mean age : 54 years) with non-ulcerated buccal lesions of lichen planus, 14 patients (mean age : 57 years) with leukoplakia, and 3 healthy volunteers (mean age : 21 years). The diagnosis of lichen planus was confirmed on histopathology and by staining with anti-fibrinogen antibody along the basement membrane zone using the immunofluorescent technique. The lesions of leukoplakia showed orthokeratosis or parakeratosis with nil to moderate dysplasia; there were no positive findings on immunofluorescence. Langerhans cells were identified as epithelial cells which stained with OKT6, and had 2 or more dendrites and a nuclear space with reduced or absent staining. Langerhans cells were seen in all the biopsies evenly distributed in the stratum spinosum. In some cases of LP there was, in addition, a network of Langerhans cells present suprabasally and between the basal cells. The Langerhans cells appeared to stain more intensely in lichen planus than in leukoplakia or normal mucosa. The numbers of Langerhans cells was quantitated by counting their number per unit area per high power field, and their number per unit epithelial surface length and per unit basement membrane length in 25 fields per biopsy. There was a mean of 308 Langerhans cells/mm^2 in lichen planus while there were 91 cells/mm^2 in leukoplakia and 84 cells/mm^2 in normals. Similarly, the number of Langerhans cells/mm of epithelial surface length and basement membrane length were 80/mm and 70/mm respectively in lichen planus, while it was 26/mm and 26/mm in leukoplakia and 40/mm and 33/mm in normal mucosa. The authors suggest that the increased number of Langerhans cells in lichen planus may be responsible for processing and presenting an unidentified antigen to the infiltrating lymphocytes and may thus contribute to the pathogenesis of lichen planus. The authors also note that an increased number of Langerhans cells in lichen planus can be an additional criterion to distinguish this disease from the clinically similar leukoplakia.

M Ramam

Long-term cyclosporin for psoriasis, Griffiths CEM, Powles AV, McFadden J et al : Brit J Dermatol, 1989; 120 : 253-260.

A number of recent studies have demonstrated that cyclosporin is effective in the treatment of psoriasis. The disease, however, recurs relatively quickly after stopping cyclosporin and so it is likely to be given over long periods of time. The authors studied the efficacy and safety of the drug when used in a low-dose, long-term maintenance treatment regimen. Thirteen patients aged between 27-74 years with severe psoriasis uncontrolled by other measures were treated with cyclosporin 3 mg/kg/day initially, adjusted according to the response and the side-effects, upto a maximum of 4 mg/kg/day. Topical corticosteroids were used on resistant patches after 3 months of therapy. The patients were followed up for 12-25 months (mean 18 months). There was an 81% reduction in the severity and area of involvement at the

end of the study; at 4 weeks, it was 72%. In the 3 patients who had a break in the treatment for 2 weeks to 2 months, a gradual relapse of lesions occurred which was controlled on re-starting the drug; there was no flare-up as seen with systemic corticosteroids. Six patients had a persistent rise in blood pressure; in 3 this was managed with anti-hypertensive drugs and in the remaining 3 by reducing the dose. Serum creatinine levels showed a rise from mean levels of 72 μM/l to 90 μM/l but stayed within the normal range. Seven patients (5 females and 2 males) developed hypertrichosis which, however, did not warrant stoppage of the drug. Liver function tests and hematological tests showed no abnormalities. One patient who had received methotrexate, PUVA and etretinate in the past, developed squamous cell carcinoma of the anal margin 6 months after starting cyclosporin. Cyclosporin was given for 19 months after resection of the tumour with no evidence of recurrence or a new tumour. The authors conclude that low-dose long-term cyclosporin is effective and relatively safe in the treatment of psoriasis.

M Ramam

Ketanserin in the treatment of systemic sclerosis : a double-blind controlled trial, Ortonne JP, Torzuole C, Dujardin P et al: Brit J Dermatol, 1989; 120 : 261-266

It has been suggested that vascular injury to small arteries and capillaries is the primary event in the pathogenesis of systemic sclerosis. Since serotonin has been shown to affect the function of peripheral blood vessels in pathological conditions, many recent studies have used ketanserin, a selective S_2-serotonergic receptor antagonist, in the treatment of systemic sclerosis. Results from these trials have been contradictory prompting the authors to perform a double-blind, randomized, placebo-controlled trial. Twenty four patients aged 26 to 79 years diagnosed to have systemic sclerosis according to the criteria of the American Rheumatism Association, were admitted to the trial after stopping all previous therapy for 6 weeks. Patients were randomly allocated to receive ketanserin 40 mg/day for 2 weeks followed by 80 mg/day for 6 months or placebo. Patients were assessed before the trial and at 1, 2, 4 and 6 months. The patients scored their asthenia, arthralgia, Raynaud's phenomenon and dyspnoea on a scale of 0-10 and recorded the frequency and duration of the Raynaud's attacks. Objectively, the number of digital ulcers, the maximum oral aperture and the circumference of the mid-point of the second phalanx of the middle finger were recorded. Skin pigmentation and the ability to fold or pinch the skin were also noted. In addition, a functional index of the ability to perform 19 ordinary movements was also recorded. At the end of the trial, both the patient and the physician made an assessment of the treatment as successful, partially successful or failed. Fourteen patients received ketanserin and 10 received placebo. There was no significant difference in any of the criteria between the two groups. There were no significant side effects. However, the physician's subjective assessment of treatment success at the end of the trial in patients receiving ketanserin was 67% while it was 0% in the patients receiving placebo. The authors state that the result of their trial makes it unlikely that serotonin has a major role in the pathogenesis of systemic sclerosis. They however, note that ketanserin was useful in a dose of 120 mg/day in another open trial and suggest that large doses may be beneficial in some patients of systemic sclerosis.

M Ramam

Immunotherapy of genital warts with inosine pranobex and conventional treatment : double blind placebo controlled study, Davidson-Parker J, Dinsmore W, Khan MH et al : Genitourin Med, 1988; 64 : 383-386.

Inosine prabonex is an immunomodulator that has been reported to be effective in the

treatment of genital warts. The authors used the drug as an adjunct to conventional treatment with podophyllin or trichloroacetic acid in a multicentre double-blind placebo-controlled trial. Fifty one patients aged 18 years and above with genital warts for at least 1 year received inosine prabonex 1 gm thrice daily for 28 days or placebo in addition to the conventional treatment used routinely for warts at each centre. Patients were seen at 2, 4, 8 and 12 weeks after starting the treatment and the number and extent of the warts, the development of new warts and the side-effects were recorded. Twenty four patients received inosine prabonex and 27 received placebo. Follow up was very poor with only 27 patients having attended all four follow up visits. In these patients, complete eradication of the warts or a significant reduction in the extent of the lesions was seen significantly more frequently in patients receiving inosine prabonex. There was no difference in the development of new lesions in the two groups. A similar trend was noticed when the data on all 51 patients who attended at least one follow up visit were analysed. There were no significant side effects. The authors conclude that in patients with long-standing genital warts, a 4-week course of inosine prabonex can significantly improve the efficacy of conventional treatment.

M Ramam

Enoxacin as one day oral treatment of men with anal or pharyngeal gonorrhoea, Bakhtiar M and Samarasinghe PL, Genitourin Med, 1988; 64 : 364-366.

Enoxacin is a new oral quinolone preparation that has been shown to have *in vitro* activity against *Neisseria gonorrhoeae*. The authors treated 50 men with gonorrhoea (40 had anal gonorrhoea, 6 had pharyngeal gonorrhoea and 4 had both) with 400 mg enoxacin as a single dose or as two doses of 200 mg given 12 hours apart. The minimum inhibitory concentration (MIC) of enoxacin was determined against each strain of *Neisseria gonorrhoeae* isolated. Isolates were also tested for beta lactamase production. Of the 50 men, 44 were clinically and bacteriologically cured when examined 3-5 days after treatment, 1 was re-infected and 5 were lost to follow-up. Thirty three patients attended for follow-up 7-10 days after treatment and all of them continued to remain clinically and bacteriologically free of gonorrhoea. The MIC of enoxacin for all strains, including 3 which were beta lactamase producers was very low, ranging from 0.025-0.25 mg/litre with a mean of 0.12 mg/litre. No major adverse effects were noted. The authors conclude that 400 mg enoxacin given as a single or divided dose is effective in the treatment of rectal and pharyngeal gonorrhoea.

M Ramam

Epidemiological study of leprosy in Malwani suburb of Bombay, Chaturvedi RM : Leprosy Rev, 1988; 59 : 113-120.

The epidemiology of leprosy was studied between April 1979 and April 1983 in Malwani, a western suburb of Bombay (population: 63,321) by a mass house-to-house survey, school survey, household contact survey of the index cases, referrals from health centres, dispensaries and general practitioners, and self-reported cases. The cases were diagnosed clinically and bacteriologically, and grouped into non-lepromatous, borderline and lepromatous types according to the Indian classification. A total of 691 cases [547 (79.16%) tuberculoid, 98 (14.18%) borderline and 46 (6.66%) lepromatous] were detected with a prevalence rate of 10.91/1000. The prevalence rate in schools was 13.81/1000. The peak incidence was observed in the age group 10-19 years. The male : female ratio was 1 : 1.33 which is the reverse of that seen in other studies; the reason for this was unclear. The

prevalence was significantly higher in Muslims than in Hindus probably due to the larger average family size and over-crowding. The average per capita income of leprosy patients was Rs. 62.00 while the average for the Malwani population was Rs. 99.05. The percentage of contacts of patients who were found to have leprosy was 1.7% when the index case was of tuberculoid leprosy, 2.87% when it was borderline leprosy and 3.10% for contacts of lepromatous leprosy. In the 157 patients who had a single lesion, the commonest sites were the arm, leg, thigh and buttocks. The deformities of the eyes, hands and/or feet were present in 129 (18.67%) patients. The type of dwelling, whether zopadpatti, chawls or individual tenements did not affect the prevalence of the disease.

M Ramam

The influence of antimycobacterial chemotherapy on delayed hypersensitivity skin-test reactions in leprosy patients, Cree IA, Smith WCS, Rees RJW et al : Leprosy Rev, 1988; 59 : 145-151.

To study the changes in the delayed-type hypersensitivity with anti-leprosy treatment, the authors performed skin tests using purified protein derivative (PPD) and Rees skin test antigen (RSTA), a soluble extract of armadillo-derived *M. leprae* which contains a higher proportion of specific *M. leprae* antigen. Fifty three treated leprosy patients, 52 newly-diagnosed untreated leprosy patients, 78 household contacts of untreated leprosy patients, 50 persons with no history of exposure to leprosy and 20 leprosy hospital workers were tested. In paucibacillary patients, positive skin test reactions to both PPD and RSTA occurred more frequently in treated patients and this difference was statistically significant with PPD reactions. In multibacillary patients, positive reactions with PPD and RSTA were both significantly more frequent in the treated patients, and the diameter of the positive reactions to PPD were larger in the treated group than in the untreated patients. In the healthy subjects, there was no significant difference in the reactions to PPD and RSTA between household contacts of leprosy patients and persons with no human contact with leprosy. All the leprosy hospital workers showed a positive reaction to PPD and only 2 were negative with RSTA. On comparing the paucibacillary patients with household contacts, there were significantly higher responses to PPD in treated patients than in contacts, while there were no differences with RSTA. The treated multibacillary patients also showed a significantly higher response to PPD (but not to RSTA) than household contacts. The untreated multibacillary patients showed significantly fewer responses to RSTA than controls, but this difference was not seen with treated multibacillary patients. The authors conclude that treatment of patients with multi-drug therapy enhances the delayed-type hypersensitivity to both the common and the specific mycobacterial antigens.

M Ramam

Atopic dermatitis and house dust mites, Beck H-I and Korsgaard J : Brit J Dermatol, 1989; 120 : 245-251.

One of the factors implicated in the causation of atopic dermatitis is inhalant allergy to the house dust mite. Previous studies have shown that patients have a high exposure to house dust mites and that 75% of children with atopic diseases are sensitized to house dust mites by the age of 10. In the present study, the authors have examined the occurrence of house dust mites in the houses of patients and non-atopic controls. Dust samples were collected from the houses of 26 patients with atopic dermatitis, 20 non-atopic patients with psoriasis and 41 healthy persons, by vacuum cleaning 1 m^2 of

the mattress surface and bedroom floor for 5 minutes. House dust mites (*Dermatophagoides* spp) were counted by mixing 0.1 mg of dust with 10 ml of 90% lactic acid in a 10 cm petri dish, with a few drops of Lignin pink dye and incubating it for 2 days at 55°C. Following incubation, mites were counted under a stereomicroscope at a magnification of X25. All patients with atopic dermatitis were also prick tested with extracts of *Dermatophagoides pteronyssinus*. A median of 14 mites/0.1 gm of mattress dust and 14 mites/0.1 gm of bedroom floor dust were received from the houses of patients with atopic dermatitis which did not differ significantly from the counts from the houses of healthy controls and psoriasis patients. However, the median number of mites in the houses of patients with moderate to severe atopic dermatitis was 85 mites/0.1 gm of mattress dust and 42.8 mites/0.1 gm of bedroom dust which was higher than that seen in the controls. Out of 25 patients who were prick-tested, 12 had positive skin test reactions. There was no corelation between the prick test positivity and either the severity of atopic dermatitis or exposure to the house dust mites. The authors conclude that while the epidemiological association of moderate-to-severe atopic dermatitis and house dust mites is convincing, the final proof will be in showing the beneficial effects of reduction or elimination of the house dust mites from the houses of these patients.

M Ramam

Treatment of children with port-wine stains using the flashlamp-pulsed tunable dye laser, Tan OT, Sherwood K and Gilchrest BA : N Eng J Med, 1989; 320 : 416-421.

The argon laser has been used for approximately 10 years for the treatment of port-wine stains (PWS) with good results in 80% of adults but with cosmetically unacceptable scarring in upto 40% of the treated children. The recently developed flashlamp-pulsed tunable dye laser appears to be better for treating children. The laser has a penetration of 0.7 mm of dermis before the energy levels fall to 50% and this is adequate to reach the dermis of children (0.6 mm) and of adults (0.9 mm thick). It can be adjusted to emit energy at 577 nm which corresponds to one of the absorption maxima of oxyhemoglobin present in the blood vessels of the PWS. The chief advantage of this laser, however, is the delivery of energy in pulses lasting 360 μ sec. The irradiated vessels can dissipate this heat energy before the next pulse. The argon laser, on the other hand, is a continuous wave laser and pulses can be given only by using a mechanical shutter, which regulates pulses of 200 m seconds. Each such pulse, however, heats up the vessels to such an extent that there is considerable damage to the surrounding tissue when the energy is dissipated. Consequently, scarring is expected to be more than with the pulsed laser. The authors used the tunable dye laser to treat 35 children (aged below 14 years) with PWS. A test site of approximately 4 cm^2 was first irradiated with 6 J/cm^2 at a wave length of 577 nm with a pulse duration of 360 μ sec. The test site was evaluated after 6-8 weeks and if there was significant improvement in the colour without scarring, the whole lesion was treated in parts at 6-8 week intervals till complete clearing. If however, the test site showed lack of significant improvement a fresh test site was irradiated with 0.25 J/cm^2 increments till the dose to produce complete clearing was determined. Subsequently, the whole lesion was treated with this dose. Similarly, in patients whose test site showed scarring the dose of irradiation was reduced to an effective, non-scarring level and the whole lesion treated. An average of 6.5 treatments were required for complete clearing. In 33 patients, the colour and texture of the skin became completely normal at the end of treatment. Two patients had isolated, superficial, depressed scars in areas that were inadvertently traumatised within 24

hours of irradiation. Transient hyperpigmentation on the cheeks occurred in 20 of 35 patients but cleared completely after 3-4 months in all of them. The excellent results suggest that the flashlamp-pulsed tunable dye laser is superior to the argon laser in the treatment of PWS in children.

M Ramam

The treatment of chilblains with nifedipine : the results of a pilot study, a double-blind placebo-controlled randomized study and a long-term open trial, Rustin MHA, Newton JA, Smith NP et al : Brit J Dermatol, 1989; 120 : 267-275.

The lack of a satisfactory treatment for chilblains prompted the authors to use nifedipine, a drug that has been useful for the treatment of Raynaud's phenomenon. In a pilot study, 10 women who had just developed chilblains were given nifedipine 5 mg daily, increased daily by 5 mg till the chilblains were controlled, or till the maximum tolerated dose was reached, for 6 weeks. Seven out of 10 patients showed complete improvement within 14 days at a daily dose of 60 mg. The highly encouraging results of the pilot study led to a double-blind, placebo-controlled cross-over trial in 10 females with severe, recurrent chilblains. They were given nifedipine retard 20 mg 3 times daily or placebo for 6 weeks and then crossed-over. In seven out of 10 patients treated with nifedipine, pain and irritation improved in 4-5 days, old lesions subsided in a mean of 8 days (range 7-10 days) and no new lesions developed. In patients treated with placebo however, pain and irritation improved in 23-25 days, old lesions subsided in a mean of 24 days (range 20-28 days) and new lesions continued to develop. Mild facial flushing, headache and ankle swelling were seen in 2 patients on nifedipine, but only 1 patient required reduction of the dose to 40 mg daily because of symptomatic hypotension. The authors have also reported the use of nifedipine in a larger open study in 34 patients, 29 of whom had chilblains on the hands and/or feet and 5 on the thighs. Nifedipine retard, 20 mg daily was administered for 3 days, 20 mg twice a day for 3 days and then 40 mg in the morning and 20 mg at bed time for 2 months. Most patients took 60 mg of nifedipine, but in 16 the dose had to be reduced because of headache and flushing. The chilblains cleared in 5-42 days. The study of cutaneous blood flow to the digits by the laser Doppler velocimetry in 12 patients showed an increase of 18% in the blood flow in 7 patients and no change in 5 patients. Biopsies of the lesion before and after the treatment showed a clearing of the dermal edema and epidermal necrosis and a reduction in the intensity and the depth of the mononuclear inflammatory cell infiltrate. Nifedipine probably acts by causing vasodilatation and increasing perfusion of the microvasculature of the digits. The authors conclude that nifedipine is useful both for the treatment of chilblains and for preventing relapses.

M Ramam

Prevention of congenital syphilis, Chattopadhyay B : J Applied Med, 1989; 15 : 285-291.

Congenital syphilis is the most severe form of infection caused by *Treponema pallidum*. Since the infectivity is very high, almost 100% if the mother has untreated primary or secondary disease, antenatal care of the high-risk group of pregnant women is very important. Despite the availability of penicillin, syphilis continues to be a major problem in some of the developing countries. Every pregnant woman should have a treponemal test such as the TPHA test which may or may not be accompanied by a reagin test, e.g. VDRL or RPR test, thus avoiding biological false positive results. If the onset of maternal syphilis is less than a year's duration the chance of transmission to the foetus is extremely high but the risk of foetal infection is

much lower in late maternal syphilis. In order to prevent congenital syphilis the mother has to be treated with penicillin before delivery. The optimum treponemicidal concentration is 0.03 mg/l which should be maintained for 7-10 days. For early syphilis benzathine penicillin is given in a dose of 2.4 mega units as a single dose, while for syphilis of more than one year's duration it is given once a week for three successive weeks. The babies born should be examined clinically and serologically at birth and later on till the tests become negative. Treatment of the infant is indicated when, (1) there are clinical or radiological signs of syphilis, (2) when the reagin tests rise or persist at high levels, (3) when the treatment of the mother was inadequate or not known, and (4) when antibiotics other than penicillin were administered or the infant cannot be followed up. Infants with congenital syphilis should have a CSF study before treatment. The baby should be given procaine penicillin 50 mg/kg body weight intramuscularly daily for 10 days if symptomatic or asymptomatic but with abnormal CSF. When follow-up cannot be made or the infant is asymptomatic with normal CSF, 50 mg/kg of benzathine penicillin is given as a single dose which however does not reach an adequate treponemicidal level in the CSF. For congenital infection of more than 2 years' duration, the dosage will be equal to that used for acquired infection of the same duration in adults. Failure rate of benzyl penicillin in preventing congenital syphilis is reported to be 8% in a recent series. Erythromycin (not the estolate) is a suitable alternative to penicillin. If the mother has been cured and followed up for 2 years after treatment, she does not require treatment in subsequent pregnancies. However, the serological tests should be performed on the baby at the age of 3 months.

K Anitha

The pathomechanisms of psoriasis; the skin immune system and cyclosporin, Bos JD : Brit J Dermatol, 1988; 118 : 141-155.

Psoriasis is a common chronic disease of unknown primary aetiology. In this review article the author presents the investigational approaches of the secondary and tertiary pathomechanisms of psoriasis under three headings: cellular, intercellular and intracellular. In psoriasis there is an increase and activation of many cell types in the skin lesions, especially immunocytes. This is reflected in the intracellular biochemical abnormalities that have been observed in the transmembranous signal transducing systems, adenylate cyclase cAMP, guanylate cyclase cGMP, phospholipase and tyrosine kinase. Such a state of activation is associated with generation of arachidonic acid metabolites, which tend to increase or perhaps even initiate inflammation. This possibly produces keratinocyte hyperproliferation also. The immune system of the skin shows a number of abnormalities, of which an increase in the subepidermal dendritic cells and the high number of T-cells infiltrating the epidermis appear disease specific. A variety of mediators like interleukins and interferons produced by the skin immune system also play a role in keratinocyte hyperproliferation. Cyclosporin is an effective and safe drug used for the induction of remission in severe psoriasis vulgaris. It seems to inhibit several activation pathways. The particular success of the drug may be due to the synergistic interaction with some pathomechanisms mentioned above.

N Sasi

New antiviral drugs, Bryson MD : J Amer Acad Dermatol, 1988; 18 : 212-218.

A nearly infinite number of combination therapies for viral diseases appear to be in vogue. The authors describe some new antiviral

drugs which are still under investigation but which can be used more effectively than conventional antiviral drugs. These antiviral drugs are ribovirin, bromovinyl-deoxy-uridine, phosphonoformate, sodium phosphonoformate, zidovudine, guancicloside analogues, buciclovir and interleukin-2. Ribovirin is a drug with a broad-spectrum antiviral activity against both RNA and DNA viruses that can be given orally, I/V or by aerosol. It has beneficial effect against human immuno-deficiency virus infection both in vitro and in vivo by decreasing the progression of infection to AIDS in patients with AIDS-related complexes. However, its penetration to the CNS is defective. Bromovinyl-deoxy-uridine is used for the treatment of varicella because the virus is extremely susceptible to this drug. Sodium-phosphonoformate in 3% concentration applied locally for recurrent herpes simplex has been shown to have a good effect. Zidovudine is a new antiviral drug. It acts against transcriptase enzyme. Zidovudine and acyclovir may have a synergistic effect against AIDS virus. Guanciclovir has a chemical structure similar to that of acyclovir. It inhibits DNA polymerase in a competitive way and is used for CMV and EB virus infections. Deoxy acyclovir is converted to acyclovir after absorption, by xanthine oxidase. It is used for varicella-zoster and EB virus infections. Halogenated pyrimidine nucleoside analogues are active against herpes simplex type I and II, varicella-zoster virus and CMV. Buciclovir is used for the treatment of herpes simplex virus and other infections. Interleukin 2 apparently prevents or attenuates HSV-2 vaginal infections. Now the combination therapies are tried for viral infections. These include two or more antiviral drugs, immunomodulators combination with antiviral drugs, and interferon with antiviral drugs.

Sreerekha Panicker

Amyloid and amyloidosis, Breathnach SM : J Amer Acad Dermatol, 1988; 18 : 1-16.

Amyloidosis is a generic term that signifies abnormal extracellular deposition of proteins which have characteristic staining properties and ultrastructural features. It can be divided into localised and systemic varieties. The systemic type includes a primary type which is usually associated with plasma cell dyscrasia, a type associated with multiple myeloma and a type secondary to various chronic disorders. A number of heredo-familial syndromes have also been reported to be associated with amyloid deposition. The exact pathogenesis is not known. Various amyloid fibril proteins like amyloid P and amyloid L have been described. Amyloid P is deposited in primary and myeloma associated varieties and amyloid A in the secondary systemic variety and in some heredo-familial amyloid associated conditions. Primary localised cutaneous amyloidosis includes macular, papular (lichen amyloidosis) and the rare nodular forms. The nodular variety may be regarded as an extra-medullary plasmacytoma. In lichen amyloidosis the amyloid deposits arise as a result of focal epidermal damage with subsequent conversion of degenerated epidermal cells into amyloid in the papillary body. The presenting symptoms of primary and myeloma associated amyloidosis are usually non-specific. The mean age of onset is 65 years and it is more common in the males. The classical features are carpal tunnel syndrome, macroglossia, muco-cutaneous lesions, hepatomegaly and oedema. Cutaneous findings are seen in 29-40% of the primary and myeloma associated amyloidosis. These are petechiae, purpura, ecchymosis, thickening of cutaneous blood vessels, jaundice, and pallor. The most characteristic features include waxy smooth asymptomatic papules, nodules and plaques often with a haemorrhagic appearance. Systemic findings are hepato-splenomegaly, lymphadenopathy, arthritis, and cardiac, blood vessel, gastro-

intestinal, renal, neurological and haematological involvements. In the nodular variety of localised cutaneous amyloidosis multiple nodules are seen. Macular amyloidosis shows pruritic grayish persistent macules arranged symmetrically on the trunk and limbs. Lichen amyloidosis shows persistent, pruritic, hyperkeratotic papules and plaques mainly on the shins. Histopathologically characteristic amyloid deposits are seen in the upper or deep dermis or in the subcutis depending upon the type. Some of the special stains used are methyl violet, cresyl violet, PAS and congo red. Fluorescence methods, polarised microscopy and immunohistochemistry are also very helpful for the diagnosis. Rectal biopsy is the classical method for the diagnosis of systemic amyloidosis. The drugs tried in systemic amyloidosis are melphalan, prednisolone, colchicine and dimethyl sulfoxide. Dialysis can also be tried. The treatment modalities in localised cutaneous variety include excision or laser therapy for nodular type and dermabrasion, topical dimethyl sulfoxide, retinoids or antihistamines in the macular and papular varieties. But the important point to remember is the intractability of these conditions and the prognosis is very poor in the plasma cell dyscrasia related variety of amyloidosis.

K Anitha

Peripheral leukocytes in psoriasis, Liu C, Ji M, Fang X et al : Internat J Dermatol, 1988; 27 : 638-641.

Differential leukocyte count in the peripheral blood was examined in 192 patients with different types of psoriasis in an attempt to observe the changes of leukocyte subsets, including the morphology and acid X-naphthyl acetate esterase (ANAE) activity of lymphocytes in different types and stages of the disease and extensiveness of the skin lesions. In patients receiving no anti-neoplastic or immunosuppressive drugs, the peripheral leukocytes were abnormal in 96.2%. The number of total leukocytes and polymorphonuclear leukocytes was markedly increased in erythrodermic and pustular types of psoriasis. Marked eosinophilia also was observed in them. A marked decrease of circulatory lymphocytes, especially T-lymphocytes was noticed especially in non-vulgaris types. They were markedly reduced in number in patients receiving anti-neoplastic and immuno-suppressive drugs. Atypical lymphocytes such as cleaved nuclear and plasmacytoid lymphocytes were seen in increased numbers. But their number had no correlation with the disease activity or the extent of skin lesions. More than three quarters of the patients had decreased T-lymphocytes. Anti-neoplastic drugs and immunosuppressants intensify the degree of T-lymphocytopenia. The authors suggest that this decrease in T-lymphocytes might be the cause of easy relapse and more obstinate course of the disease after treatment with these drugs. Therefore, according to them, the immunosuppressants and anti-neoplastic drugs should not be the first choice in the treatment of psoriasis and when used should be cautiously administered.

K Pavithran

Polymorphonuclear leukocyte functions in psoriasis, Goihman-Yahr M, Molina T, Martin BS et al : Internat J Dermatol, 1988; 27 : 633-637.

In the course of a comprehensive study of phagocyte functions in several groups of diseases, the authors evaluated chemotaxis, random movement, adherence, metabolic activation, in vitro spreading and phagocytosis and digestion of *Candida albicans* and two different isolates of *Paracoccidioides brasiliensis*. This was done in normal individuals, psoriatics, patients with chronic alcoholic liver disease and patients with paracoccidioidomycosis. The results showed that all groups behaved similarly to those of normal individuals in tests that measured

phagocytosis, digestion of *C. albicans*, in vitro spreading, and peroxidase activity. Leukocytes from patients with severe or widespread psoriasis did not show increased activity in the several functions tested. This included adherence and chemotaxis. The results of this study in psoriatics are contrary to the common concept that functions of circulating neutrophils are stimulated in psoriatics. The present study indicates that psoriasis vulgaris, even if it is widespread, does not by itself stimulate the activities of circulating neutrophils in a significant fashion.

K Pavithran

Leukoderma punctata, Falabella R, Escobar CE, Carrascal E et al : J Amer Acad Dermatol, 1988; 18 : 485-494.

Oral psoralen and subsequent exposure to sunlight is a standard and accepted method of treatment for vitiligo. The authors noticed development of numerous depigmented spotty macules during or after discontinuation of PUVASOL therapy for vitiligo. The patients developed multiple punctiform, white, hypopigmented and achromic spots on the upper and lower extremities and occasionally on the face, gluteal regions, and upper back or chest areas. The lesions were very numerous, distinct, round or oval macules with sharply demarcated borders, measuring on an average from 0.5 to 1 mm. Dopa and Fontana stains disclosed, in most cases, decreased but not absent functional melanocytes and a marked reduction of melanin. Ultrastructural studies showed slight to severe damage to keratinocytes and melanocytes similar to that previously reported in vitiligo patients. The authors postulate that the most likely cause of punctate leucoderma seen after PUVASOL is phototoxicity induced by psoralen and natural UVA and UVB. A probable relationship among idiopathic guttate hypomelanosis, leucoderma punctata and vitiligo is discussed.

K Pavithran

Combination therapy (monomycine and methyluracil) in leishmaniasis cutis, Hossain MZ : Internat J Dermatol, 1988; 27 : 720-722.

Cutaneous leishmaniasis remains a serious disease in the endemic areas because of its prolonged morbidity and disfiguring scars. Many therapeutic modalities such as chemotherapy, physical therapy, and surgery have been used but all these therapeutic regimens have proved not to be very satisfactory. Monomycine is a broad spectrum antibiotic that has been reported to be beneficial in the treatment of leishmaniasis. The author combined methyluracil with monomycine in cutaneous leishmaniasis because of the former's ability to reduce the toxic effect of the latter. Fifty patients were treated with 250,000 units of monomycine IM every 8 hours and 0.5 gm of methyluracil orally twice daily for a total period of 10 days. This treatment was found to be effective in all and there was no evidence of the appearance of metaleishmaniasis, when followed up for 12 months. There was rapid reduction of the inflammatory reaction, quick regression of the skin process, and rapid formation of the scar without significant cosmetic defect. This is probably the result of the synergistic effect of the two drugs. Methyluracil is a pyrimidine derivative that reduces the toxic effect of monomycine when both are used together and also stimulates the immunity of the patients suffering from cutaneous leishmaniasis.

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Topical estrogens : Current status, Shapiro I : Internat J Dermatol, 1988; 27 : 673-675.

Local estrogenic therapy has been effective in many dermatologic disorders. The author discusses the merits and demerits of this form of therapy. The effects of oestrogen on the skin include increased epithelial mitosis, reduction of sebaceous gland activity, and slowing of hair growth. Various conditions in which topical

oestrogens have been found to be beneficial include acne vulgaris, seborrhoea oleosa, male and female-pattern baldness, keratoderma climactericum, urogenital atrophy, hidradenitis suppurativa, menopausal vasomotor complaints and female hypogonadism.

There are many advantages of using topical oestrogen compared to its systemic administration. A low dose estradiol patch is now available for oestrogen replacement. The skin metabolises it only slightly. Because estradiol has a half-life of less than one hour, blood levels of estradiol decline rapidly. Since this delivery system avoids hepatic metabolism, there is no significant increase in the levels of renin substrate or other hepatic proteins. The author hopes that in future there should be greater use of topical oestrogens as the population ages, for the control of osteoporosis in the older woman. This transdermal delivery system avoids the liver and has the advantage of using a low total dose.

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Clinical features and course of type A and type B vitiligo, Koga M and Tango T, Brit J Dermatol, 1988; 118 : 223-228.

The aetiopathogenesis of vitiligo is still not fully understood, though an autoimmune mechanism has been suggested in its development. The authors have classified vitiligo into type A and type B. Type B is the one that occurs in a dermatomal pattern and a dysfunction of sympathetic nerves has been suggested for its development. Type A included all cases of vitiligo not classified as type B. The authors carried out a clinical study of 481 cases of vitiligo and found that the incidence of type A and type B was in the ratio 3 : 1. The onset of type B was generally at a younger age whereas type A occurred in all age groups. Type B was localised and had a rapid course but the duration of activity was short. They had no associated autoimmune diseases or allergic diseases. They were not associated with halo nevus or Koebner phenomenon. On the other hand, type A vitiligo was generally widespread and had a slow course with periods of increased activity of the lesions. The associations with the Koebner phenomenon, halo nevus and other autoimmune diseases were significantly more in this type of vitiligo. These findings suggest that type A and type B vitiligo have a different pathogenesis and that autoimmune mechanisms play a role only in type A.

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