ABSTRACTS FROM CURRENT LITERATURE

Oestrogen and progesterone receptors in lentigo maligna, Sawaya ME, Garland LD, Rothe MJ et al : Brit J Dermatol, 1988; 118 : 69-71.

Lentigo maligna, usually seen in the elderly, is characterized by a slowly enlarging macular lesion with variegated black-brown colouration and an irregular outline. It is commonly seen on the face and upper extremities especially on the areas exposed to sunlight. Rarely, malignant melanoma may develop in these lesions. Reports of the presence of oestrogen receptors and progesterone receptors in malignant melanoma prompted the authors to study these receptors in lentigo maligna tumours. They measured oestrogen and progesterone binding in specimens of histopathologically confirmed lentigo maligna lesions excised from 5 elderly males, using a dextran coated charcoal method. The lesions were situated on the cheeks in 2, on the shoulder in one, on the mid-back in one and on the chest in the remaining one. Oestrogen binding was observed in four of the five specimens and progesterone binding in all five. In all five specimens, the neighbouring normal skin showed only non-specific binding for oestrogen and progesterone. Levels of steroid receptors in melanoma though ranging widely are generally lower than those in tumours of the prostate, breast or other sex hormone target tissues. High levels of these receptors have been reported in melanoma. The authors' finding of an increase in these receptors in lentigo maligna compared to normal neighbouring tissue suggests the possibility that steroid responsiveness may be relevant in the transformation of lentigo maligna into malignant melanoma.

K Pavithran

Lichen sclerosus et atrophicus and autoimmunity—a study of 350 women, Thomas RHM, Ridley CM, Mc Gibbon DH et al : Brit J Dermatol, 1988; 118 : 41-46.

The aetiopathogenesis of lichen sclerosus et atrophicus (LSA) is not fully known. An increased incidence of autoimmune-related disorders and an increased incidence of autoantibodies have been shown in the affected individuals. But the relevance of these findings is not clear. This study was carried out to determine whether there are any identifiable differences in the clinical features of LSA in those women in whom autoimmune-related phenomena can be demonstrated compared with those in whom autoimmune-related phenomena are not found. Three hundred and fifty women with clinically and histopathologically typical LSA were studied. Fifty percent of them were post-menopausal females and the site commonly affected was the vulval and perianal skin. Seventy five (21.5%) patients had one or more autoimmune-related diseases, alopecia areata and vitiligo being the common ones. Seventy four (21%) had one or more first-degree relatives with an autoimmune-related disease. The common diseases in them were thyroid disease, pernicious anaemia, diabetes mellitus and alopecia areata. Forty two percent of the patients had one or more autoantibodies at a titer of 1 : 20; 26 patients had two autoantibodies and one patient had three. Commonest autoantibodies were, antithyroid antibody (25%) and antinuclear antibody (10%). Autoimmune-related phenomena were recorded in 209 patients. There were no statistically significant differences between those patients with, and those without, autoimmune-related phenomena (i.e. a personal or a family

history of an autoimmune-related disease or an autoantibody) as far as the natural history of LSA is concerned.

K Pavithran

Treatment of ingrowing toe nails by surgeons and chiropodists, Sykes PA and Kerr R : Brit Med J. 1988; 297 : 335-336.

Ingrowing toe nail is a common problem encountered in dermatology clinics but the treatments available have not been critically evaluated. Surgeons usually treat it by avulsion and chiropodists by segmental phenolic ablation. In a preliminary study, the rate of recurrence of ingrowing nail when 164 hallux nails were treated with simple surgical avulsion was 32% when followed up after 1 year and 42% after 3 years. Another group of 152 patients were treated either by total phenolic ablation or by total excision of the nail bed with a knife (Zadik's operation). The overall recurrence rate was 14%. A third group of patients was treated with segmental phenolic ablation either by the surgeons or by the chiropodists. The recurrence rate at 12 months after segmental phenolic ablation was only 5%, chiropodists achieving slightly better results than the surgeons. The cost of treatment for segmental phenolic ablation was only one-third that by surgical method. As segmental phenolic ablation results in fewer recurrences, savings would be greater as the number of re-operations would fall. But patients with systemic or arterial disease which might impair healing should be treated by doctors and not by chiropodists.

K Pavithran

Adverse reactions to acyclovir : topical, oral and intravenous, Arndt KA: J Amer Acad Dermatol, 1988; 18 : 188-190

Topical as well as oral acyclovir is widely used now-a-days for the treatment of herpes simplex virus infection. Though the use of this drug is usually associated with very few adverse side effects, there are a few adverse effects to be watched for. The most frequent reactions with short term use of oral acyclovir are nausea and vomiting. When the drug is administered continuously for 6 months the side effects that may occur are headache, diarrhoea, nausea and vomiting. The frequent reaction after intravenous acyclovir is development of inflammation and phlebitis at the injection site. Precipitation of acyclovir in renal tubules may occur when the solubility of acyclovir in intratubular fluid is exceeded and therefore, rapid or bolus intravenous, intramuscular or subcutaneous injection must be avoided. One percent of patients may develop encephalopathic changes with abnormal encephalogram and lethargy, tremors, confusion and seizures. The drug should be used with caution in patients with neurologic, renal or hepatic disease and in patients receiving other intrathecal drugs such as methotrexate and interferon. The topical acyclovir is free from serious side effects though it may rarely cause rashes.

K Pavithran

Genital herpes during pregnancy; routine virological screening is futile, Kelly J : Brit Med J, 1988; 297 : 1146-1147.

Neonatal herpes infection occurs in about one in 500 pregnancies in parts of the United States. The transmission of herpes infection from mother to the foetus or baby is high (40%) in primary maternal infection but low (3%) in recurrent maternal infection. Though routine screening for detecting maternal infection has been recommended by some, it has been questioned by others. Large studies showed that maternal cultures taken before birth do not predict which infants are at risk of exposure to HSV at delivery. In one study, the virus was shed during labour in 14 out of 6904 consecutive patients. The laboratory takes 3 to 4 days to

recognize the patients who are without symptoms but are shedding the virus : the information is thus of no value in labour but may be useful to the paediatrician. In recent years there has been a huge increase in caesarean sections because of possible herpes infection in the mother. It has generally been assumed that if caesarean section is done before the membranes rupture the baby is safe, but at least 19 cases of neonatal herpes occurred when the caesarean section was performed before the membranes ruptured. This suggests that intrauterine infection is not as rare as has been thought. It also suggests that it is futile to do routine cultures on women entering pregnancy with a history of genital herpes. If a lesion suspicious of herpes is seen, swabs should be taken for culture and the women considered for delivery by caesarean section if labour is in the early stages. If there is no obvious lesion in the genital tract, vaginal delivery should be allowed. Evidence suggests that routine use of oral acyclovir in pregnancy in women in whom herpes infection is reported should be discouraged.

K Pavithran

Effect of PUVA on intestinal calcium absorption, Virvidakis KE, Brokalakis JD, Singhellakis PN et al : Brit J Dermatol, 1988; 118 : 219-221.

An increase in serum concentration of 25-OH vitamin D has been reported in patients with psoriasis treated by photochemotherapy with 8-methoxypsoralen and UVA. Because vitamin D must be converted to a metabolically active form before it can function, the biological significance of this finding is not clear. Intestinal calcium absorption can be used as a measure of the functional activity of vitamin D. In this study the authors have measured intestinal calcium absorption in patients before and after PUVA therapy. Fourteen patients were studied. Seven of them received 14 days of treatment with PUVA while the remaining seven received only UVA irradiation. In each patient intestinal calcium absorption was measured by a double radioisotope technique before and 14 days after starting the treatment. Results revealed that there was a significant increase in the absorption of calcium in the intestine in those treated for 14 days with PUVA, while no significant change in the mean value occurred in the patients exposed to UVA radiation alone. This finding suggests that the increase in serum 25-OH vitamin D levels in patients treated with PUVA may have important biological consequences. The exact mechanism of this change is not known. It is suggested that it may be linked to the photochemical reaction that results from the exposure of psoralens to UVA. This reaction seems to be related to the binding of psoralens to DNA by the action of UVA. The potential hazards of excessive vitamin D are hypercalcaemia and hypercalciuria which may lead to ectopic calcification in the kidneys causing renal failure. So monitoring of serum and urinary calcium is advisable in patients treated with long-term PUVA.

K Pavithran

The role of proteases in the pathogenesis of bullous dermatoses, Takamori K, Yoshike T, Morioka S et al : Internat J Dermatol, 1988; 27 : 533-539.

Proteases are enzymes that catalyze the hydrolysis of peptide bonds, and are composed of exopeptidases and endopeptidases. The protease activity in a tissue is regulated by several conditions such as the rate of synthesis, degradation, and secretion of proteases or the interaction with inhibitors present in the body fluids. Pathologic conditions could be induced when these regulatory mechanisms break down. One of the most evident roles of proteases in the skin is the turn-over of tissue and cellular

proteins. Other features are activation of proenzymes and hormones, promotion of cell dyshesion and cell growth. Pathologic roles are formation of leukocyte chemotactic peptides, increased permeability of vessels and induction of inflammation. Protease plays an important role in the induction of blisters. Serine and carboxyl proteinases help in cell dyshesion in pemphigus and proteinases induced by immune reactions cause dermal epidermal separation in bullous pemphigoid. Recent studies show that proteases play a role in the induction of blisters in epidermolysis bullosa also. Some proteases released from the infiltrating leukocytes may induce blister formation in dermatitis herpetiformis and erythema multiforme. It has been speculated that specific dyshesion of epidermal cells comes from the activation of proteases in Hailey and Hailey disease and Darier's disease.

N Sasi

HTLV—A new human retrovirus associated with cutaneous T-cell lymphoma, Fine RM : Internat J Dermatol, 1988; 27 : 473-474.

The etiology of cutaneous T-cell lymphoma is unknown. Recently, substantial evidence has accrued to support a viral etiology. It has become clear that at least some of the cases of atypical mycosis fungoides are examples of adult T-cell lymphoma caused by infection with human retrovirus HTLV-I. Although patients with adult T-cell lymphoma have a variety of skin lesions resembling mycosis fungoides, there are certain other features which are unique. Response to conventional chemotherapy is usually prompt but short-lived. Because of the similarities between mycosis fungoides and adult T-cell lymphoma, it has been speculated that the former may also be caused by HTLV-I or a closely related retrovirus. Further support for retroviral cause of mycosis fungoides is provided by Manzari after isolating a new human retrovirus HTLV-5 from a patient. Subsequently, 150 patients with T-cell leukemia and lymphoma were screened. The sera from these patients and from the wife of one of the patients showed borderline positivity to HTLV-1 and HIV-1 with enzyme-linked immunosorbent assay technique. Western Blot showed inconsistent positivity. Accumulated evidence shows that at least some cases of mycosis fungoides and Sezary syndrome are caused by retrovirus closely related antigenically to HTLV-1. A small percentage of cases in Manzari's series were associated with HTLV infection suggesting a not homogenous etiology. If this is true, the current treatment of cutaneous T-cell lymphoma must be modified from the conventional approach to the treatment of malignancies to the one that includes treatment for retroviral disease.

Sreerekha Panicker

Necrotising vasculitis with granulomatosis, Yevich I : Internat J Dermatol, 1988; 27 : 540-546.

Liebow was the first to classify the group of disorders associated with vasculitis and necrosis of the tissue with a granulomatous reaction. Three major disease entities in this category are Wegener's granulomatosis, allergic angiitis and granulomatosis (Churg-Strauss syndrome [CSS]), and lymphomatoid granulomatosis (LYG). In this review article, the author has presented the clinical features, histopathology and treatment of each disease.

Wegener's granulomatosis is commonly met with in males about 40 years of age. The lungs, kidneys, skin, gastro-intestinal tract and joints are the organ systems most frequently involved; the less frequent ones being the nervous system, eyes and ears. Lungs are most commonly involved and the upper respiratory complaints are the most frequent. The renal involvement ranges from focal segmental glomerulosclerosis to

rapidly progressive glomerulonephritis. Coarse IgM and IgG deposits in granular form are found in the renal vessels. Cutaneous lesions occur usually on the extremities and are typical of vasculitic lesions. Polyarthritis is usually of symmetrical nature. Histopathologically, there is predominantly a necrotising granulomatous infiltrate that has a polymorphous infiltrate of neutrophils, plasma cells and histiocytes. Untreated Wegener's granulomatosis has a very poor prognosis. The current treatment of choice is a combination of cyclophosphamide and prednisolone.

The criteria for Churg-Strauss syndrome include a history of asthma, systemic vasculitis and peripheral eosinophilia. The age of onset is between 20-40 years and there is no sexual predilection. The prodromal phase consists of allergic rhinitis or asthma. Allergic rhinitis is the commonest presenting feature. Eosinophilia can be present at any stage of the disease. In the vasculitic phase various organ systems are involved. Cutaneous lesions are palpable purpura, maculo-papular eruptions, urticaria and nodules. Abdominal pain is common and may indicate perforation of bowel, peritonitis, intestinal obstruction, mesenteric vasculitis or cholecystitis. The heart is a primary target organ in CSS with extensive replacement of myocardium by granulomas. Neuropathy occurs in 75% of the cases. Renal involvement could lead to a segmental glomerulonephritis. Arthritis can also occur. The main histopathologic features of CSS are tissue infiltration by eosinophils, extravascular granulomas and necrotising vasculitis. Steroid therapy is the treatment of choice. A certain proportion of patients require adjunctive therapy with immunosuppressive agents. Plasma exchange has also been tried.

Lymphomatoid granulomatosis is a relatively rare disease. It is seen in both sexes, average age being 45 years. The pulmonary system is primarily involved. Manifestations range from abnormal asymptomatic pulmonary infiltrates to massive destruction of the lung parenchyma. The primary skin lesions are asymptomatic dermal nodules and plaques. Peripheral neuropathy and cranial nerve and central nervous system involvement can occur singly or in combination. Gastro-intestinal system, kidneys, adrenals and heart can also be involved. Histopathologically, a destructive granulomatous perivascular infiltrate is present in the dermis, composed of atypical lymphoid cells predominating over mature lymphocytes and plasma cells. Therapy usually involves a combination of steroids and immunosuppressive agents. Radiation therapy and bone marrow transplantation have been tried.

K Anitha

Clinical, pathologic, and immunopathologic manifestations of the toxic oil syndrome, Phelps RG and Fleischmajer R : J Amer Acad Dermatol, 1988; 18 : 313-324.

Toxic oil syndrome first occurred in 1981 in Madrid, Spain. It was attributed to ingestion of olive oil contaminated with rapeseed oil. More than 20,000 patients were affected and more than 200 died. Here the authors present the clinical, pathologic and immunologic findings of 14 patients with the toxic oil syndrome. It occurred in two phases, acute and chronic. The features of the acute phase were due to associated pneumonitis and the patients developed cough, dyspnoea, fever and sometimes pulmonary oedema. They had nausea, vomiting and periumbilical pain also. The skin manifestations varied and included urticaria and a maculopapular exanthem. The important features of the chronic phase consisted of progressive and insidious motor and sensory neuropathy, combined with an inflammatory myositis. The features resembled dermatomyositis. There was extreme wasting of the muscles especially the

interosseous muscles. Other features were pulmonary hypertension, xerostomia, arthralgias and cardiac failure. Overlying the areas of neuromyopathic injury, the skin was sclerodermoid and in some cases poikilodermatous. True acrosclerosis was seen in only a few cases. The blood vessels of the skin, especially the postcapillary venules showed a multilaminated basal lamina, a discontinuous pericyte cover, and a connective tissue sheath. For the dermatologists it is important to differentiate toxic oil syndrome from progressive systemic sclerosis. Toxic oil syndrome is an acute toxic syndrome but systemic sclerosis develops only insidiously. Toxic oil syndrome patients develop pulmonary hypertension unassociated with pulmonary fibrosis. Further, the peripheral neuropathy that develops in toxic oil syndrome is rare in systemic sclerosis. The skin changes, unlike those seen in systemic sclerosis are found primarily in areas of neuromuscular injury, do not often involve acral sites and are reversible with time. Despite these differences, toxic oil syndrome remains an important model for studying the pathogenesis of collagen vascular diseases, including scleroderma.

K Pavithran

Risk factors in the development of cervical intraepithelial neoplasia in women with vulval warts, Walkinshaw SA, Dodgson J, McCance DJ et al : Genitourinary Medicine, 1988; 64 : 316-320.

Earlier studies have shown that some women with vulval warts have cervical intraepithelial neoplasia (CIN) at the time of initial assessment, some others develop it subsequently, while some do not. The authors studied 59 women with vulval warts to assess the significance of the factors previously linked with cervical cancer viz age, parity, age at first coitus, multiplicity of sexual partners, duration of oral contraceptive use and smoking and their role in CIN associated with warts. All the women underwent cervical cytology, colposcopy and colposcopic biopsy prior to treatment of the warts. On initial assessment, 12 women had CIN, 12 had human papilloma virus (HPV) infection of the cervix and 30 had no abnormality. There were no differences in any of the risk factors between the group of women with CIN and those with no abnormality. Viral DNA typing of the vulval warts also showed no difference in the frequency of DNA types between the two groups. Of the 30 women with no abnormality, 23 were followed up for one or two years; 3 of them developed CIN in spite of adequate treatment of their genital warts. In view of the large proportion of women with genital warts showing CIN at the initial assessment and the development of CIN in some women even after treatment of warts, the authors suggest that women with genital warts should be assessed cytologically and colposcopically at regular intervals.

M Ramam

Serum lipid changes during acitretin (etretin) treatment of psoriasis and palmo-plantar pustulosis, Vahlquist C, Selinus I and Versby B : Acta Dermato-Venereol, 1988; 68 : 300-305.

Acitretin, the main active metabolite of etretinate, is not stored in the adipose tissue for as long as etretinate and consequently has a half-life of approximately 50 hours compared with 100 days for etretinate. The chief advantage of this shorter half-life is that the period of risk for teratogenicity in women will be considerably reduced and the drug is expected to replace etretinate in the near future. Like etretinate, acitretin is also expected to have effects on serum lipid metabolism. The authors have studied the effects of the drug on the serum

lipoprotein pattern and on an intravenous fat tolerance test (IVFTT) in 8 patients with psoriasis and 4 with palmo-plantar pustulosis who were treated for 12 weeks with an average daily dose of 40 mg. Acitretin increased the triglyceride concentration of the very low density lipoprotein and decreased the cholesterol concentration of high density lipoprotein leading to an increase in the atherogenic index which increases the risk of cardio-vascular disease. The intravenous fat tolerance test indicated a lowering of the ability to eliminate fat. All these abnormalities completely reverted to normal 8 weeks after the drug was stopped. The data suggests that acitretin has the same effect on the serum lipids as etretinate.

M Ramam

Patch testing with nickel sulphate under occlusion for five hours, Bruze M : Acta Dermato-Venereol, 1988; 68 : 361-364.

Routine patch testing is usually performed with the allergens under occlusion for 48 hours, but a shorter occlusion time would be more convenient for the patient. In this study, the author used occlusion for only 5 hours in patch testing with nickel. Eight females who were previously patch test positive with nickel (5% in vaseline) were subjected to patch tests with occlusion for 5 hours with nickel in concentrations of 30%,20%, 15%,10% and 7.5% in water, and 5%, 0.889%, 0.158%, 0.028% and 0.005% with occlusion for 48 hours. Equivalent patch test reactions were seen with nickel 30% in water for 5 hours and 5% in water for 48 hours. Patch testing with nickel sulphate 30% in water for 5 hours on the upper arm in 5 controls was negative. Increasing the concentration of the allergen appears to be an easy way to reduce the occlusion time. However, the author cautions that irritant reactions and patch test-sensitization may be more likely with higher concentrations of allergen. Shorter occlusion times may also give false-negative results in the case of an antigen which is part of a composite product.

M Ramam

Comparative histology of skin and nerve granulomas in leprosy patients, Mukherjee A and Misra RS : Leprosy Rev, 1988; 59 : 177-180.

There are contradictory reports on the comparative histopathology of skin and nerve in leprosy patients. Some workers state that the changes are identical while others have noted a larger bacillary load in the nerve and histopathology at the lower end of the spectrum in the nerve as compared to the skin. This study compared the histopathology in the skin and nerves of 22 patients (clinically classified as TT-2, BT-14, BB-1, BL-1 and LL-3). In 14 patients the histopathological classification was identical for the skin and the nerve while in 8 patients there was a variation. In all the 14 patients who showed similar changes in the skin and the nerve there were well-formed granulomas at both sites, however the skin showed a larger number of giant cells while the nerve showed more caseation and a more widespread granuloma. In the 8 patients who showed discordance between the skin and the nerve histopathology, a well-formed granuloma was seen at one of the two sites while the other site showed an inflammatory infiltrate. In 6 patients, the granuloma was seen in the nerve with the skin showing either indeterminate or a non-specific change while in 2 patients the reverse was true. The authors suggest that the difference may be attributable to the local immune response at the site leading either to quicker granuloma formation or more rapid resolution at one of the two sites. However, in most patients there is

no significant difference in the histopathology of the skin or the nerve.

M Ramam

Psoriasis and vitamin D_3, a review of our experience, Morimoto S and Yoshikawa K : Arch Dermatol, 1989; 125 : 231-234.

The chance observation of the disappearance of psoriasis in a patient with senile osteoporosis treated with 1-α hydroxy vitamin D_3 (1-α [OH] D_3) prompted the authors to study the efficacy of vitamin D_3 in psoriasis. Forty patients with psoriasis vulgaris were randomly assigned to one of the following non-blind treatment schedules : (1) 1-α (OH) D_3, 1.0 μg daily orally for 6 months; (2) calcitriol (1, 25-dihydroxy vitamin D_3), 0.5 μg daily orally for 6 months; and (3) calcitriol, 0.5 μg/gm of petrolatum topically under occlusion for 8 weeks. Thirteen out of 17 patients treated with schedule 1, 1 out of 4 patients treated with schedule 2, and 16 out of 19 patients treated with schedule 3 showed improvement. In the case of schedule 3, no improvement was seen in the vehicle-treated contralateral skin lesions. The authors also studied the serum levels of calcium, inorganic phosphate, 1,25 dihydroxy vitamin D, 25 hydroxy vitamin D, parathormone and calcitonin in the patients before and after the treatment and in age-matched controls. There was no significant difference between the baseline serum levels in the patients and the controls. After 3 months of treatment with the schedules 1 and 2, there was a significant elevation in the mean serum levels of calcium, inorganic phosphate and 1,25 dihydroxy vitamin D in the former group and of calcium in the latter. There was no change in any parameter after 3 weeks of treatment with schedule 3. There was no correlation of these parameters with the severity of disease, except with the serum level of 1,25 dihydroxy vitamin D which showed an inverse relationship with severity. Biologically active metabolites of vitamin D_3 are effective in the treatment of psoriasis, probably by suppressing the proliferation and promoting the differentiation of keratinocytes. The authors however state that a multicenter double-blind trial of oral treatment failed to show any effectiveness, though an on-going multicenter study of topical calcitriol has given promising results.

M Ramam

Etretinate : persistent serum levels after long-term therapy, DiGiovanna JJ, Zech LA, Ruddel ME et al : Arch Dermatol, 1989; 125 : 246-251.

Storage of etretinate in the body fat leads to persistence of the drug for many months after discontinuation of therapy.The authors measured serum levels of etretinate following stoppage of long-term therapy in order to characterize its elimination from the body. Serum etretinate concentrations were measured by high performance liquid chromatography in 47 patients from one to 244 weeks after cessation of the therapy. The patients had received the treatment for upto 6 years. The earliest that etretinate became undetectable in the serum was 5 weeks after stopping the treatment and the latest was 168 weeks post-treatment. Out of 10 patients in whom serum samples were taken more than 2 years after stopping the treatment, 5 continued to show detectable serum levels of etretinate. The half-life of the drug during this phase of elimination ranged from 5.3 to 24.8 weeks. The half-life in a particular patient did not correlate with the total dose of etretinate received by him. Overweight patients, having excess body fat, showed a higher serum concentration of etretinate, a longer half-life and a longer period of persistence of the drug in serum after discontinuation of the therapy.

M Ramam

A cutaneous sign of IgA-associated small dermal vessel leukocytoclastic vasculitis in adults (Henoch-Schonlein purpura), Peette WW and Stone MS : Arch Dermatol, 1989; 125 : 53-56.

Seven out of 67 patients with small vessel vasculitis seen by the authors over a 5-year period showed distinctive cutaneous findings. These features included the presence of superficial plaques, rather than papules, of palpable purpura; multiple areas of hemorrhage or necrosis within these plaques usually arranged in a livedoid pattern; a retiform configuration of the margins of the plaques; and often a livedoid pattern of hemorrhage connecting adjacent purpuric lesions. At least three of the features were present in each case. All the patients, in addition, had classic lesions of palpable purpura. On histopathological examination of skin biopsies from the lesions, six patients showed leucocytoclastic vasculitis while one showed a perivascular lympho-histiocytic infiltrate. Direct immunofluorescent staining of biopsies revealed prominent IgA deposits in or around blood vessels. All patients had a prolonged course of the cutaneous lesions and 5 of them had evidence of extracutaneous disease. The authors suggest that the presence of the distinctive cutaneous findings described by them may help to identify a subset of patients with small vessel vasculitis with a worse prognosis.

M Raman

Reduced DNA repair in cultured melanocytes and nevus cells from a patient with xeroderma pigmentosum, Kraemer KH, Herlyn M, Yuspa SH et al : Arch Dermatol, 1989; 215 : 263-268.

Since patients with xeroderma pigmentosum (XP) have a more than 1000-fold increase in the incidence of malignant melanoma, the authors studied melanocytes and nevus cells from a patient with XP to see if these cells also showed the characteristic DNA repair defects seen in XP. Melanocytes, nevus cells and fibroblasts were cultured from skin biopsies of 4 melanocytic nevi (2 congenital and 2 acquired) in a 12-year-old patient with XP. Cultures of the 3 cell types were exposed to 30 J/m^2 of ultraviolet (UV) light of predominantly 254 nm. All 3 cell-types showed a depressed post UV exposure DNA synthesis which was 30-50% of that seen in irradiated normal fibroblasts. The survival of the patient's nevus cells and fibroblasts following exposure to 6 J/m^2 of UV light was also reduced to 10% as compared to normal fibroblasts. The authors conclude that their data suggests that malignant melanomas in xeroderma pigmentosum are caused by somatic mutations in melanocytes and nevus cells due to their inability to repair UV induced DNA damage.

M Ramam

Topical methotrexate therapy for psoriasis, Weinstein GD, Mc Cullough JL and Olsen E : Arch Dermatol, 1989; 125 : 227-230.

Laurocapram is a substance that enhances the percutaneous absorption of methotrexate. Topical application of methotrexate in laurocapram gel inhibited DNA synthesis in the skin of normal hairless mouse and minipig. This prompted the authors to study the effects of topical methotrexate with laurocapram in a two-centre double-blind study of 42 patients with plaque psoriasis. Patients were randomly assigned treatment with 0.1%, 0.5% or 1% methotrexate in a 3% laurocapram gel formulation, and with laurocapram vehicle alone. The gel was applied twice daily to a 5×5 cm area of lesional skin for 6 weeks. Following treatment, there was more than 50% improvement in 16 (64%) of 25 patients treated with 0.1% methotrexate, 10 (59%) of 17 treated with

0.5% methotrexate, 9 (56%) of 16 treated with 1% methotrexate and 4 (25%) of 16 patients who applied the vehicle alone. Some patients complained of burning and irritation with the methotrexate gel and also the vehicle alone. There were no systemic side effects, no alterations of hematological and biochemical parameters and no detectable levels of methotrexate in the serum. These findings suggest that methotrexate preparations that provide adequate percutaneous absorption may be useful in the treatment of psoriasis.

M Ramam