ABSTRACTS FROM CURRENT LITERATURE

On the pathogenesis of idiopathic guttate hypomelanosis, Rafael F, Carlos E, Nelson G et al: J Amer Acad Dermatol, 1987; 16 : 35-44.

Idiopathic guttate hypomelanosis is a common, benign, unstable, progressive, leucodermic condition characterized by small, asymptomatic, hypopigmented or achromic porcelain white macules mainly affecting the exposed areas of upper and lower extremities occurring in the adults of both sexes. The number and the size of the lesions increase with advancing age. The cause of the condition is unknown but several aetiologic factors such as chronic sun exposure, senile degenerative change, post-traumatic hypopigmentation, autoimmunity, genetic factor etc are believed to be responsible, but none of these have as yet been satisfactorily proved. In view of the obscure nature of the condition, the authors studied a group of 15 patients with idiopathic guttate hypomelanosis comparing with 15 normal controls matched by age, sex and skin type. The study concluded that : (1) There is no relationship of the disease with ultraviolet light irradiation. (2) There is a possible genetic predisposition in the pathogenesis of the disease. (3) Intralesional triamcinolone could be a useful therapeutic approach for the disease. (4) There is an active depigmenting mechanism in the disease rather than a simple residual depigmentation.

P B Haribhakti and Rita Macwan

Familial anetoderma, Friedman S, Venencie P, Bradley R et al : J Amer Acad Dermatol, 1987; 16 : 341-345.

Anetoderma is a hereditary or acquired cutaneous disorder resulting from a local dermal defect of elastic tissue giving rise to localised areas of atrophic and often sac like lesions. Associated ocular, bony, cardiac and gastro-intestinal abnormalities are often reported. The authors report two families with anetoderma where a mother and daughter in the first family, and two sisters in the second family were affected. All the patients showed numerous, well-defined, asymptomatic, atrophic, hypopigmented lesions over the chest, abdomen and back, sac-like lesions showing herniation phenomenon on palpation were also found in two patients. The lesions were thus of the non-inflammatory type (Schweninger Buzzi). Familial anetoderma is uncommon but six families including the authors' cases have been reported so far. It may be due to a congenital defect of elastin but further studies are required to determine the nature of the abnormality. Infections may have a role in the pathogenesis. The authors advise thorough examination of all patients with anetoderma for associated systemic abnormalities.

P B Haribhakti and Rita Macwan

Bullous pemphigoid controlled by tetracycline, Thornfeldt C and Menkes A : J Amer Acad Dermatol, 1987; 16 : 305-309.

The authors report the efficacy of oral tetracyclines in two patients with persistent, non-scarring, localised bullous pemphigoid. An initial dose of 250 mg or 500 mg of oral tetracyclines twice daily with or without prednisolone 60 mg as single morning dose cleared all bullae and inflammatory lesions in three weeks. Long term remissions were then maintained by only 250 mg or 500 mg single daily doses of tetracyclines. The reported patients are the first ones with any form of bullous pemphigoid whose eruption is completely controlled by oral

tetracycline. The effectiveness of tetracycline could be due to its action on polymorphonuclear leucocytes including eosinophils. Tetracyclines inhibit neutrophil chemotaxis and migration and thus are also anti-inflammatory. This antibiotic may be used in localised bullous pemphigoid as a sole therapeutic agent or as a systemic corticosteroid sparing one. Its effectiveness in generalised bullous pemphigoid requires further trials.

P B Haribhakti and Rita Macwan

Syringoma presenting as milia, Friedman S and Butler D : J Amer Acad Dermatol, 1987; 16 : 310-314.

Syringomas are common, benign, appendageal tumours derived from the intra-epidermal eccrine ducts. The authors present a distinctive clinical variant of syringoma—milium-like lesions found in two patients, the first of its kind reported so far. The lesions were in the form of multiple, asymptomatic, white, firm, globoid papules 1-3 mm diameter distributed on the lower eyelids and upper cheek area, resembling milia. Histopathology of the lesions was suggestive of syringoma and showed numerous keratin cysts in the papillary and mid-dermis together with small ductal structures, some comma shaped, filled with amorphous hyaline material as well as solid strands of basaloid cells in a fibrous stroma.

P B Haribhakti and Rita Macwan

Carbon dioxide laser in the treatment of porokeratosis, Hunziker and Bayard : J Amer Acad Dermatol, 1987; 16 : 625.

There are reports of successful treatment of various types of porokeratosis (Linear, hyperkeratotic and zosteriform) by carbon dioxide laser with only slight scarring and hypopigmentation in the treated areas and an impressive disappearance of lesions in the untreated areas. No recurrence has been reported so far.

P B Haribhakti and Rita Macwan

Condylomata acuminata (Genital warts)—An epidemiologic view, Chuang and Madison : J Amer Acad Dermatol, 1987; 16 : 376-383.

Condyloma acuminata or genital warts represent all benign ano-genital lesions infected by the human papilloma uirus (HPV). The disease is on an increasing trend over the years and has also exceeded the incidence of genital herpes. It predominantly occurs in young adults and more women than men are found to be affected. Modern diagnostic techniques have identified 42 different types of HPV, 16 of these being involved in condyloma acuminata. Condyloma acuminata undergoing malignant transformation is well documented. Types 16, 18 and 33 are significantly involved in genital cancers. The so called flat or inverted condyloma of the cervix mis-diagnosed in the past as cervical dysplasia is a HPV induced disorder and has a potential for malignant transformation. Its association with genital herpes as believed previously is now superceded by condyloma accuminata which plays a more important role in genital cancers. Apart from cervical carcinomas, cancers can also develop on the vulva, vagina, penis as well as non-genital areas such as the mouth.

There is also a strong correlation between genital warts and verrucous carcinoma of the genitalia (Giant condyloma of Buschke and Lowenstein), Bowenoid papulosis and laryngeal papillomas. The authors strongly recommend periodic follow up of patients with genita warts for early detection of neoplasia.

P B Haribhakti and Rita Macwan

Serum elevation of dehydroepiandrosterone sulfate associated with male pattern baldness in young men, Pitts R : J Amer Acad Dermatol, 1987; 16 : 571-573.

Male pattern baldness is a genetically determined disorder induced by the action of excessive amounts of androgens on hair follicles of susceptible individuals. Dehydrcepiandrcsterone and its metabolites have recently been found to play an important role in the regulation of scalp, skin and pilo-sebaceous metabolism. Estimation of the serum dehydrcepiandrcsterone sulfate and testosterone levels in 18 young men with progressive male pattern baldness and a strong family history of the disorder revealed a marked elevation of dehydroepiandrcsterone sulfate levels (340 to 730 μg/dl) as compared to the level (124 to 300 μg/dl) estimated in a normal control group. Serum testosterone levels were within normal limits. Dehydroepiandrosterone sulfate is the major secretory product of the adrenal gland and about 90% of the circulating dehydroepiandrosterone sulfate originates from the adrenal cortex. This hormone inhibits the enzyme glucose-6-phosphate-dehydrogenase during the growing phase of the hair folicle and thus stops normal hair growth. The finding of an elevated serum level of dehydroepiandrosterone in patients with male pattern baldness implies that hyperadrenalism may be an important element in the complex biochemistry of the disorder.

P B Haribhakti and Rita Macwan

Pityrosporum folliculitis : Treatment with isotretinoin, Friedman S : J Amer Acad Dermatol, 1987; 16 : 632-633.

Pityrosporum folliculitis is a recurrent disease characterized by small, mildly erythematous, pruritic follicular papules and superficial pustules over the areas of distribution of acne vulgaris. The condition is poorly responsive to systemic antibiotics and requires prolonged intermittent therapy similar to pityriasis versicolor. The author reports a case of pityrosporum folliculitis successfully treated with a course of systemic isotretinoin at a dose of 40 mg (0.65 mg/kg) daily for 20 weeks. Recurrence however occurred within 10 months of discontinuation of the drug. Pityrosporum is a lipophilic yeast and the effectiveness of isotretinoin in pityrosporum folliculitis is supposed to be due to reduction in the sebum secretion or alteration in its biochemical content. Higher dosage of the drug may provide longer remissions but considering the potential adverse effects of isotretinoin, its routine use for a disease such as pityrosporum folliculitis is not advisable especially when usual topical antifungal preparations are also effective.

P B Haribhakti and Rita Macwan

Immunohistology of pityriasis lichenoides et varioliformis acuta and pityriasis lichenoides chronica, Evidence for their interrelationship with lymphomatoid papulosis, Wood G, Strickler J, Abel E et al: J Amer Acad Dermatol, 1987; 16 : 559-570.

An immunohistologic comparison of pityriasis lichenoides et varioliformis acuta, pityriasis lichenoides chronica and lymphomatoid papulosis has revealed that the clinicopathologic similarities of the three diseases are also maintained at the immunopathologic level and these are interrelated. The authors employed monoclonal antibodies directed against a variety of cellular antigens to study the immunohistology of lymphoid and other cells in biopsy specimens of pityriasis lichenoides acuta (3 cases) and pityriasis lichenoides chronica (3 cases) and compared them with their prior studies of 9 patients with lymphomatoid papulosis. In both pityriasis lichenoides acuta and pityriasis lichenoides chronica, nearly all cells within the cellular infiltrate were either T cells or macrophages, but in PLEVA, CD8+T cells (cytotoxic/

suppressor phenotype) exceeded or equalled CD4+ T cells (helper phenotype) whereas in pityriasis lichenoides chronica (PLC), the CD4+ T cell subset predominated. The lesional epidermis was diffusely HLA—DR+ and contained decreased CD1+ dendritic cells (Langerhans/indeterminate cells). Endothelial cells were also HLA—DR+. Cells bearing the phenotypes of B cells, follicular dendritic cells, or natural killer cells, were essentially absent. The results were similar to that found in lymphomatoid papulosis except that the large atypical cells were absent. Studies have shown clonal rearrangements in lymphomatoid papulosis indicating that this disease is a clonal T cell lympho-proliferative disorder. The other two diseases—PLEVA and PLC may also represent T cell lymphoproliferative disorders because clonal T cells have been reported in some cases of PLEVA though rarely, but patients with either form of pityriasis lichenoides may also be at risk for developing overt lymphoma though the probability is much less than those with lymphomatoid papulosis.

The host response is more effective in PLEVA as seen by the greater proportion of CD8+T cells which may be cytotoxic to keratinocytes and/or Langerhans cells as potential targets clinically evident as extensive epidermal necrosis. The fewer cytotoxic/suppressor cells in PLC suggest it to be an attenuated form of the same disease process.

P B Haribhakti and Rita Macwan

Action of cotrimoxazole on head lice, Burns DA : Brit J Dermatol, 1987; 117 : 399-400.

Insects which feed on blood carry symbiotic bacteria in their gut. In anufluran lice, these bacteria are present in cells known as mycetocytes which are grouped together in an organ, the mycetome. The nymphs and adult males possess a single mycetome in the ventral wall of the midgut, whereas in adult females the symbiotic bacteria are found in association with the ovaries. These bacteria are transmitted transovarially, and are essential to the insect for the synthesis of B-group vitamins. The ingestion of antibiotics with a bloodmeal will destroy these bacteria and precipitate a slow decline in the health of the insect. Also, head lice cannot lay fertile eggs unless some of these bacteria are inserted into the eggs before the egg-shells are complete. Unless cotrimoxazole is directly toxic to lice, it would appear that destruction of symbiotic bacteria would provide a reasonable explanation for the observed effect of this drug on the insects.

Jayakar Thomas

The skin changes of POEMS syndrome, Ishikawa O, Nihei Y and Ishikawa H : Brit J Dermatol, 1987; 117 : 523-526.

POEMS syndrome is a multisystem disorder characterised by polyneuropathy, organomegaly, endocrinopathy, the presence of monoclonal protein and skin changes. The authors describe a 68-year-old Japanese housewife with POEMS syndrome. She showed diffuse hyperpigmentation, localized hypertrichosis, Raynaud's phenomenon, sclerodactyly, proximal scleroderma and multiple haemangiomas, besides polyneuropathy, lymphadenopathy, high serum oestrone level and monoclonal IgA. Furthermore, diminished lung function, positive rheumatoid factor and positive ANA with a homogeneous-speckled pattern were observed. Therefore, a close relationship between POEMS syndrome and systemic sclerosis is suggested. The histological evidence of proliferation of immature, non-specific acid phosphatase-positive endothelial cells with erythrophagocytosis in the haemangiomas and the multicentric angiofollicular hyperplasia in the lymph nodes lead the authors to conclude that POEMS syndrome might be considered to be a connective tissue

syndrome characterized by cutaneous vascular proliferation in addition to endocrine abnormalities, and with immunological disturbances possibly leading to the development of polyneuropathy.

Jayakar Thomas

Cimetidine and chlorpheniramine in the treatment of chronic idiopathic urticaria : A multi-centre randomized double blind study, Bleehen SS, Thomas SE, Geaves MW et al : Brit J Dermatol, 1987; 117 : 81-88.

One hundred and twenty cases with chronic idiopathic urticaria, who entered a study at five centres were treated with therapeutic doses of the H1 antagonist chlorpheniramine for six weeks. Histamine H1 non-responders (40 patients)were entered into a double blind study and received either chlorpheniramine plus cimetidine 400 mg four times a day (21 patients), or chlorpheniramine plus placebo (19 patients) for a further eight weeks. The most important response measure was the change from the baseline of the total symptom score : An assessment of the number and duration of new weals and degree of itching. The symptoms were scored as follows : number of new weals : 0=no weals; 1=1-5 weals; 2=6-19 weals; 3=20 or more weals. Duration of new weals : 0=no weals; 1=upto 3 hours; 2=upto 6 hours; 3=more than 6 hours. Degree of itch : 0=none; 1=mild; 2=moderate; 3=intense. There was a statistically significant difference between the average response in the two treatment groups in favour of chlorpheniramine plus cimetidine after 4 and 8 weeks, treatment. No significant side effects related to treatment were noted. The authors conclude that the results of this study indicate that the combination of H1 and H2 antagonists may be useful in patients with chronic idiopathic urticaria. The authors also advocate consideration of this combination in clinical practice.

Jayakar Thomas

Port wine stains, Colver GB and Savin JA : J Roy Soc Med, 1987; 80 : 603.

The authors believe that these angiomatous malformations, are often due to underlying neural defects, leading to abnormal dilation of normal vessels. The decreased amount of neural tissue found in these lesions, is indicative of this. The association is further strengthened by the neural defects seen in patients with port wine stains.

Any form of treatment, be it skin grafting or Grenz rays; camouflage or cryotherapy has its drawbacks. The entry of lasers in the field was only partially successful, as dermal fibrosis resulted. Hence, a treatment modality, that would balance the vasoconstrictor/vasodilator mechanisms in the lesion, might prove to be the least destructive.

Ajay Dar

Multiple glomus tumors, Shotton JC, Davidson TI and Westbury G : J Roy Soc Med, 1987; 80 : 647-648.

A 28-year-old Caucasian woman presented with 7 blue-coloured, oval, slightly elevated, soft, non-blanchable, 0.3-0.8 cm in size lesions; located on the right thigh, right forearm, ulnar border of right hand, left elbow, left shoulder, left buttock and left thenar eminence. The thenar, buttock and forearm lesions were moderately tender. Excision biopsy of these lesions showed typical features of glomangioma.

Single and multiple glomus tumors differ in a number of ways. Clinically, the solitary tumors are almost always subungual, exquisitely tender (especially on exposure to cold), present after 20 years of age and show no familial inheritence. The multiple variety on the other hand, have no special site predilection, are asymptomatic, appear earlier and often show an autosomal dominant inheritance with incomplete penetrance. On histopathology, the

solitary variety is more cellular and less vascular. The reverse is true for multiple glomus tumors (hence called glomangioma). Rarely, another histopathological variant, called glomangiomyoma with preponderance of smooth muscle cells is found.

The multiple glomus tumors have to be differentiated from pigmented and vascular anomalies of the skin and subcutaneous tissues like, junctional nevi, pigmented multiple neurofibromas, de Morgan's spots and rarely malignant melanomas.

Both the varieties are however benign and there is no fear whatsoever of malignant change.

Ajay Dar