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ABSTRACT

AIDS and Africa: Lessons for us all, Punchirg AJ: J Roy Soc Med, 1986; 79: 501-503.

Evidence from Africa and Haiti indicates that the causative virus of AIDS, now known as human immunodeficiency virus (HIV) could be spread through heterosexual contact. This evidence is strong enough to justify taking preventive measures, especially educating sexually active heterosexuals about the risk of AIDS, before the prevalence rises any further. The sero-positivity and the manifest disease show an age profile matching peak periods of sexual activity. In some countries there is an association with prostitution. Recent observations have indicated the presence of at least one other retro virus in human populations in West Africa. This virus called HTLV-IV or LAV-2 may not cause disease in humans, but it may have important implications for the development of vaccines against HIV.

The clinical profile of African AIDS patients is somewhat different from that seen elsewhere. This is most evident in respect to the opportunist infections. Though the full profile of opportunist events in Africa remains to be established, pneumocystic infection seems to be rare, while tuberculosis (typical and atypical), cryptococcosis, cryptosporidial and isospora infections are more common. Protozoal gut infections and malaria are also common. Kaposi's sarcoma seen in African AIDS patients is more aggressive than that seen among Western AIDS cases.

It will be interesting to study the African AIDS patients to delineate the risk factors for heterosexual spread, the risk of materno-fetal spread, and the role of tropical infections as co-factors for disease etc.

Neena Vaswani

Cutaneous vasculitis: a presenting feature in Hodgkin's disease, Kessler ME and Slater DN: J Roy Soc Med, 1986; 79: 485-486.

Two patients having Hodgkin's disease presented as leukocytoclastic vasculitis. A 72-year-old patient had a 3-month history of generalised pruritus and weight loss of 6 kg. He had numerous, 1-5 mm diameter, necrotic lesions on the trunk and limbs. Four weeks later, the patient developed axillary lymph node enlargement which on histopathology revealed lymphocyte-depleted Hodgkin's disease. Skin biopsy revealed a small-vessel necrotizing leucocytoclastic vasculitis with epidermal necrosis and ulceration, and immunofluorescence identified perivascular IgM and C_3. The patient however died of an unrelated cause. The second patient was 61-year-old, with itchy, maculo-papules and necrotic lesions, histopathology of which also revealed small-vessel necrotising leucocytoclastic vasculitis. Axillary lymph node consisted of a mixed cellularity Hodgkin's disease. This patient also died of an unrelated cause. In their comments, the authors mention that a diagnosis of cutaneous small-vessel necrotising vasculitis should prompt the clinician to search for an underlying cause.

Neena Vaswani

Spironolactone in the treatment of idiopathic hirsutism and polycystic ovary syndrome, Evans DJ and Burke C: J Roy Soc Med, 1986; 79: 451-454.

Forty eight hirsute women (ages 16-45 years) were treated with spironolactone in a dose of 100 mg twice daily for 3 to 12 months.

Twenty four of these patients had evidence of polycystic ovary syndrome (PCOS) in the form of menstrual irregularities and increased luetinising hormone (LH). The other 24 were classified as idiopathic hirsutism. The response was judged by the reduction in frequency of use of local treatments such as waxing and shaving or using an arbitrary scale to grade the severity of hirsutism. Plasma testosterone was measured by radioimmunoassay. Forty two patients reported a moderate to marked improvement in their subjective assessment of the degree of hirsutism. Both facial and body hirsutism improved by 30-40% and there was a three-fold reduction in frequency of local treatments such as waxing or shaving. Plasma testosterone fell by 30%, though the improvement in hirsutism grading did not correlate with the decrease in plasma testosterone. Most of the improvement in hirsutism was already manifest at 3 months though there was a further small improvement by 12 months. Side effects included polymenorrhoea, transient nausea and mild diuresis.

Neena Vaswani

A history of Kaposi's sarcoma, Shiels RA: J Roy Soc Med, 1986; 79: 532-533.

An entity first described by Montz Kaposi in 1872, Kaposi's sarcoma (KS) has today assumed a new importance. Whilst Kaposi's origial description is still largely valid, greater knowledge of the different clinical presentations of this relatively uncommon malignancy, now permit its classification into four types, (a) an indolent form as described by Kaposi, now termed European or western or nodular variety, (b) a florid aggressive form or the African variety, (c) a form appearing in iatrogenically immunosuppressed individuals, and (d) the most recent form seen in AIDS patients.

The histopathological features in all forms of KS are uniform and consist of proliferation of spindle cells and small blood vessels, formation of vascular slits filled with erythrocytes, haemorrhages and deposition of haemosiderin.

The course of the disease varies depending on the clinical profile of the patient. The European KS, seen predominantly in elderly males, occurs mainly on the lower legs. Initially a macule, it very gradually evolves into nodules which may ulcerate. Lymph node enlargement is uncommon. Infrequently the lesion may be locally aggressive and rarely shows visceral involvement. Immune disorders are very rarely associated, but high level titres to cytomegalovirus have occasionally been demonstrated. Incidence of second primaries especially lympho-reticular neoplasms is high. African KS shows a much higher incidence than the European KS. Predominantly a disease of young males, generalised forms of the neoplasm are more frequent and follow a fulminant course. Lymphadenopathy may occur in the absence of skin lesions. Cell mediated immunity defects have been reported. In patients who are iatrogenically immunosuppressed, the disease is generalised and usually responds to withdrawal of the drug. AIDS related KS occurs usually in young homosexual males. Presenting as hyperpigmented macules and papules on the head, trunk and arms, it is associated with constitutional symptoms. Multicentric origin is frequent and is associated with opportunistic infections. Mortality is high. Antibodies to members of DNA virus group, impaired cellular immunity and reversal of helper to suppressor T lymphocyte ratio are the various laboratory parameters for detection of AIDS.

KS is a highly radio-responsive tumour and chemotherapy should be reserved for treatment of generalised KS.

Neena Vaswani

Kato T, Rokugo M, Terui T et al: Successful treatment of psoriasis with topical application of active vitamin D_3 analogue, 1 alpha, 24-dihydroxy chole calciferol; Brit J Dermatol, 1986; 115: 431-433.

The unexpected clearance of psoriatic lesions in a patient when treated with oral active vitamin D_3 (1 alpha-OH-D_3) for senile osteoporosis, subsequently led to the development of a new synthetic analogue of 1 alpha, 25 $(OH)_2$ D_3 for treatment of psoriasis. This synthetic analogue 1 alpha, 24 $(OH)_2$ D_3 was tried as topical therapy in 11 patients with psoriasis. 1 alpha, 24 $(OH)_2$ D_3 ointment containing 1, 2, or 4 microgram per gram of petrolatum were prepared and applied to the lesions in localised areas. Seven tests were done with 1 alpha, 24 $(OH)_2$ D_3 ointment containing between 1 and 4 microgram per gram under 12 hour occlusion, applied to lesions on the extremities. As a control 0.12% of betamethasone 17 valerate ointment was used in the same manner to the lesions symmetrically located on the contralateral limb. In five of seven tests the lesions cleared within one month though the steroid applied lesions cleared earlier. Further 8 tests were done with 1 alpha, 24 $(OH)_2$ D_3 ointment applied to face, scalp, trunk or limbs twice daily. Excellent results were found in five of eight patients within one month. A three week follow up showed a mild relapse in four of 11 patients; who responded well. Though the exact mechanism of action is not clear, the observations suggest that 1 alpha, 24 $(OH)_2D_3$ may induce prompt differentiation of highly proliferative psoriatic epidermal cells into squamous cells. Immunological mechanisms may be there. Thus 1 alpha, 24 $(OH)_2$ D_3 could be a potent and useful therapeutic modality in psoriasis particularly for lesions on the face and scalp provided further tests also show no side effects.

Surendran Pillai

Topical 5-fluorouracil for Corns — an effective new treatment, Swain R: Clin Exp Dermatol, 1986; 11: 396-397.

A corn is a circumscribed horny conical thickening, in response to friction or pressure, with the base on the surface and apex pointing inward and pressing upon subjacent structures.

Topical 5-fluorouracil was tried with good results for a corn which developed on the author's own right big toe. After minimal paring a piece of gauze soaked in 5% 5-fluorouracil solution was applied at night-time and left in place overnight on two consecutive nights. there was complete symptomatic relief with this and within a few days the corn became white, opaque, hard and dry. It peeled off and separated spontaneously on the 8th day after stopping the treatment. The denuded area was mildly hyperaesthetic and itchy for a few days, but soon became completely normal within two weeks. There was no side-effect during or after treatment and there has been no recurrence for more than two years. Thus 5-fluorouracil may be a safe, effective and better alternative for the treatment of corns when compared to existing treatments. It needs further trials.

Surendran Pillai

Thalidomide in the treatment of neuro-Behcet's syndrome, Ramaselaar CG, Boone RM and Kluin-Nelmans HC: Brit J Dermatol, 1986; 115: 367-370.

Behcet's syndrome is a chronic, relapsing, idiopathic multisystem disease with cutaneous, ocular, intestinal, vascular, articular and neurological manifestations.

A 21-year-old male with scrotal ulceration of 3 weeks duration and history of recurrent oral aphthosis, was investigated and diagnosed to have Behcet's disease of an incomplete type. Lesions were controlled with prednisolone 15 mg daily for one week. Discontinuation of

therapy d to recurrent scrotal ulcers and oral aphthos Later he developed fever, headache and left ded hemiparesis and a short period of organic psychiatric symptoms. The diagnosis of neuro-Behcet's syndrome was made and was treated with chlorambucil 10 mg and prednisolone 100 mg, both daily. Relapses occurred twice while gradually reducing the dose of prednisolone to 20 mg daily. On addition of thalidomide 400 mg to the medication, there have been no relapses. Since starting thalidomide three years ago, the patient has been completely free of symptoms on a maintenance dose of chlorambucil 2.5 mg daily, thalidomide 2.5 mg daily and prednisolone 5 mg every other day.

Studies have shown that thalidomide has an anti-inflammatory action in leprosy. It inhibits the chemical mediators of inflammation and inhibits chemotaxis of neutrophils. The observations in this case together with the reports of its usefulness in chronic disseminated lupus erythematosus, sub-acute cutaneous lupus erythematosus, actinic prurigo, Weber-Christian disease, strongly support a re-evaluation of thalidomide therapy in certain life-threatening diseases such as neuro-Behcet's syndrome.

Surendran Pillai

Sexually transmitted diseases and homosexuality, David GO and Norman LA: Sex Trans Dis, 1983; 10: 208-215.

A number of sexually transmitted diseases including AIDS have developed among homosexually active men during the past ten to fifteen years. This review is to make aware of the increased incidence of STDs among homosexually active men. They studied homosexually active men from the gay population. The major STDs identified in them were viral hepatitis, syphilis, amoebiasis, gonorrhoea, anal warts, genital herpes, giardiasis, non-gonococcal urethritis, non-gonococcal proctitis, shigellosis, scabies and the most important disease of this decade AIDS. The increased incidence of enteric infections like amoebiasis, giardiasis, shigellosis, hepatitis, proctitis and anal warts are due to ingestion or trauma to the rectum or anus. It is known as 'gay bowel syndrome'. Both hepatitis A and B are higher in homosexuals than heterosexual people. Various pathogens like herpes simplex virus, *Neisseria gonorrhoeae, Treponema pallidum, Giardia lamblia, Entamoeba histolytica, Chlamydia trachomatis* and *Neisseria meningitidis* were detected in homosexually active people suffering from proctitis. Increased incidence of STD in homosexually active men are due to physical factors, behavioural factors, cultural factors and legal factors. Control of STD in homosexually active men is difficult because of enormous pathogens, the multiple sites of infection and lack of information on the long-term consequences. However education and motivation have greatest effect in controlling the disease.

K Sobhana Kumari

***Treponema pallidum* in macular and papular secondary syphilitic skin eruptions, Asmus P, Takasi K, Lena S et al: Acta Dermato-Venereol, 1986; 66 : 251-258.**

Even though many electron microscopic studies of primary syphilis have been performed there is only limited knowledge about the ultramicroscopic details of the skin lesions of secondary syphilis. so authors studied ten cases of secondary syphilitic skin lesions. Eight patients had papular lesions and two had roseolar lesions. In all biopsies only a few diffusely distributed treponemes were seen. This may be the reason for the difficulty in demonstrating treponemes by darkfield examination of tissue fluids from dry secondary syphilitic skin lesions. Spirochaetes were seen both intracellularly as well as extracellularly. Intracellularly they were seen inside the macrophages, vessel walls and nerve

fibres. From the vessel, the treponemes enter the tissue by degradation of intracellular hyaluronic acid by hyaluronidase produced by the treponeme. Virulent treponeme attach to the cells with their nose pieces. Ultra microscopically, the outlines of treponemes were less distinct as compared to those of primary syphilis. Periplast membrane was absent and the cytoplasmic membrane was in close contact with an enclosing layer. Inside the enclosing layer, an electron-dense amorphous material was seen. The authors state that this substance may be the manifestation of immune reaction of the host cells to the treponeme. They noted degeneration of both myelinated and unmyelinated nerve fibres. This may be the reason for the asymptomatic skin lesions in secondary syphilis. Lymphocytes, plasma cells and histiocytes were present in nine biopsies and two showed Langhans giant cells also.

K Sobhana Kumari

A relative thrombocytosis and elevated mean platelet volume are features of gravitational disease, Goodfield MJD: Brit J Dermatol, 1986; 115: 521-529.

The platelet counts and mean platelet volume were found to be significantly high in patients with gravitational disease compared to patients with endogenous eczema or normal controls. All patients with long-standing venous disease do not progress to gravitational eczema or ulceration. So there must be additional factors determining the development of cutaneous manifestation of gravitational disease. a possible role for platelets is suggested and so platelet inhibitory therapy given at an early stage may be of value. The mean platelet volume was found to be high at all levels of platelet count. An increase in mean platelet volume can occur either due to lack of small platelet due to their consumption by the abnormal endothelial vessels of lower leg or due to the production of large, more active platelets. The platelet mass indicated by the plateletcrit would then be of more valuable index of risk for the disease.

Mollykutty Francis

Cimetidine increases the plasma concentration of hydroxyzine, Salo OP, Kauppinen K and Mannisto PT: Acta Dermato-Venereol (Stockh), 1986; 66: 349-350.

The plasma concentration of hydroxyzine is found to be high in patients with chronic urticaria treated with a combination of hydroxyzine and cimetidine than in patients treated with hydroxyzine alone. Cimetidine is known to inhibit the microsomal drug metabolism. This may explain the effectiveness of combined therapy with hydroxyzine and cimetidine. However the therapeutic effect of chlorpheneramine is not increased by giving it in combination with cimetidine. This may be due to the fact that it is not metabolised through the same liver enzymes as hydroxyzine.

Mollykutty Francis

Mask phenomenon — post-emesis facial purpura, Alcalay J, Janber A and Sandbank M: Cutis, 1986; 38 : 28.

An acute, bizarre, self-limiting form of purpura which developed on the face and neck after a vigorous bout of vomiting is reported. Purpuras can develop on the face and neck due to performance of Valsalva's manoeuver, but this is not well recognised. Here the purpura results from rupture of capillaries in the dermis. Spontaneous fading of the eruption occurs within 24-72 hours and no treatment is required. This can also occur in any exertion that increases the intra-thoracic pressure, like prolonged coughing or during child birth. Sus-

ceptibility of the patient for repeated episodes is not known.

Mollykutty Francis

Bazex paraneoplastic acrokeratosis: a case report and response to tigason, Wishart JM: Brit J Dermatol, 1986; 111: 595-599.

Paraneoplastic acrokeratosis was first described by Bazex in 1965. It is characterized by erythematous scaly lesions on the acral parts and is usually seen in association with squamous cell carcinoma of the upper aerodigestive tract that has metastasized to the neck. It was also seen in association with metastatic squamous cell carcinoma of the neck with an unknown primary. The disease usually occurs in the caucasian males 40 years or more in age. It disappears with surgery or radiation of the tumour but recurs with the regrowth of the neoplasm or with cervical node metastasis. Author reports a typical case of Bazex syndrome in a 64-year-old male patient with metastatic squamous cell carcinoma of the neck with an unknown primary. Skin biopsy showed psoriasiform hyperplasia, focal spongiosis, loss of basal cells and lymphohistiocytic infiltration in the upper dermis. He was treated with tigason (etretinate) 35 mg per day and within 2 months the skin eruption showed marked improvement. On stopping the drug he had a relapse of the skin lesion and later he died. Autospy showed disseminated metastatic squamous cell carcinoma of the liver, ribs and lumbo-sacral area. The therapeutic response to retinoid might be due to its antineoplastic effect.

Leelamma Jacob

Lupus band test: anatomic regional variations in DLE, Weigand DA: J Amer Acad Dermatol, 1986; 15: 426-428.

The lupus band test is widely used in the diagnosis of DLE and SLE. In SLE, anatomic region and/or sun exposure, is an important factor in obtaining positive test results. No data is available regarding DLE. Lupus band test was done in 71 patients with DLE. All 9 biopsies from the scalp were positive, while 38 out of 48 biopsies from face, neck, and upper extremity were positive. Only 3 out of 14 biopsies from the trunk gave positive result. The site of the biopsy must be taken into consideration when the lupus band test is used in the diagnosis of DLE. When there is no choice regarding the site, a light microscopic examination is more useful than immunofluorescence.

Mercy Paul

A comparison between one and two weeks treatment with bifonazole in pityriasis versicolor, Perez EH: J Amer Acad Dermatol, 1986; 15: 561-564.

Bifonazole is a new topical antifungal agent. A comparative study of the mycologic and clinical efficacy and the local tolerance for 1 and 2 weeks of once daily treatment of 60 cases of pityriasis versicolor with 1% bifonazole cream was made in a biometrically planned, controlled, double blind group. Response to the treatment was evident within 5 days of the therapy in more than half of the patients in both groups. Erythema subsided in both groups within 1 week, scaling subsided in 78 to 79% by 1 week and in 94 to 100% by 2 weeks in both groups. Pruritus subsided in 94-100% by 1 week and in 100% by 2 weeks in both groups. Wood's light examination and KOH examination were 100% negative in the 2-week group, while these were 96% negative in the 1-week group. The drug was well tolerated.

Mercy Paul

Pyrogallol in the tumour stage of mycosis fungoides: A case report, Van de Kerkhof

PCM: Acta Dermato-Venereol (Stockh), 1986; 66: 361-363.

Topical agents like tar, corticosteroid, nitrogen mustard, PVVA etc, found to be effective in the treatment of psoriasis have been tried with success in mycosis fungoides also. Methotrexate and retinoids, classical therapies for psoriasis, are also effective in mycosis fungoides.

Here the authors tried pyrogallol, another topical agent used in psoriasis, in a 60-year-old women suffering from mycosis fungoides. Pyrogallol 5% in petrolatum was applied daily on the tumours. The clinically uninvolved skin surrounding the lesions was protected by zinc paste. The tumours resolved via crust formation. After 2 months of therapy only a residual erythema and some hyperpigmentation remained.

The mechanism of action of pyrogallol is not clear. It is a potent reducing agent. The inhibition of catechol-o-methyl transferase by pyrogallol results in accumulation of catecholamines in the treated areas. Such an accumulation will incrase the intracellular cyclic AMP levels via stimulation of adenyl cyclase. Hyperproliferative cell systems as occur in psoriasis and mycosis fungoides, can be inhibited by increased cyclic AMP levels.

K Pavithran

Episodic oedema in type 2 lepra reaction can be caused by transient lymphatic obstruction in the lymph node, Stanley JNA, Pearson JMH and Ridley DB: Internat J Leprosy, 1986; 54: 231-235.

Oedema of the hands, feet and face is a well recognised feature of leprosy especially during reactions. Authors studied 14 patients (13 lepromatous leprosy and one borderline lepromatous case) with type 2 reaction. All patients had bilateral and symmetrical oedema and tender regional lymphadenopathy. Excision biopsy of supratrochlear lymph node was done in 5 cases. Lymphnodes were enlarged about five times its normal size, and macrophage granuloma was present within the enlarged node. The capsule showed thickening and fibrosis and the subcapsular sinuses were compressed between the fibrotic capsule and the enlarged node. They have postulated that compression of the subcapsular sinuses obstructs the flow of lymph into and through the node thereby producing the peripheral oedema.

Leelamma Jacob

The auto-immune background in lichen planus, Shuttleworth D, Graham-Brown RAC and Campbell AC: Brit J Dermatol, 1986; 115: 199-203.

The aetiopathogenesis of lichen planus is still not clearly understood. Abnormal immune mechanisms are thought to play an important role. There have been a number of reports of the association of LP with various autoimmune disorders. Some authors have reported abnormal immunoglobulin levels in patients with LP, while others have not. Here the authors undertook a systematic study of 54 patients with histologically-proven LP to determine the incidence of autoimmune disorders and autoantibodies, and to examine the levels of serum immunoglobulins.

Fifty-four patients with LP and 54 age and sex-matched controls were studied. Serum levels of IgG, IgA and IgM were estimated immunochemically using a Hyland laser nephelometer. Sera were screened for antinuclear, mitochondrial, smooth muscle and gasric parietal cell antibodies. Autoimmune disease was found in four (7%) patients in the LP group (pernicious anaemia 2, primary biliary cirrhosis 1 and alopecia areata 1) compared with two (3.5%) patients in control group. But this difference was not statistically significant. Twenty (37%) patients in the LP group were found to have titratable levels

of autoantibodies compared with 21(39%) patients in the control group. The study thus shows that these patients with LP have no specific abnormality of immunoglobulin production and in the majority of cases, lichen planus is not part of a generalized autoimmune disturbance.

K Pavithran

Demonstration of a unique viral structure: The molluscum viral colony sac, Shelley WB and Burmeister: Brit J Dermatol, 1986; 115: 557-562.

Using scanning electron microscopy of the molluscum contagiosum lesions, authors demonstrated the presence of a unique, well-defined sac enclosing the virion colony in infected keratinocytes. The exact source of this membrane is unknown but it may be a mucopolysaccharide or glue-like material of viral origin. This sac offers both anatomic and immunologic protection to the virus. So the virus replicates unchecked resulting in the production of a cell which is atrophic in function but hypertrophic in size. Thus the molluscum contagiosum lesion is a tumour composed of virus filled hypertrophic keratinocytes, whereas the HPV induced wart results from virus induced cellular hyperplasia. Molluscum contagiosum virus cannot be grown in artificial media or experimentally transferred to animals. This may be due to the failure in using free virions or the inability of the virus to enter the cell and form or induce a protective sac around its colonizing particles. Thus the presence of this sac explains some of the unique features of molluscum contagiosum virus.

Leelamma Jacob

Acute febrile neutrophilic dermatosis (Sweet's syndrome) following BCG vaccination, Radeff B and Harms M: Acta Dermato-Venereol (Stockh), 1986; 66: 357-358.

The cause of acute febrile neutrophilic dermatosis (AFND) is not fully known. An altered immunological activity with hypersensitivity to various infectious antigens has been suggested. Here the authors report a 23-year-old female who developed signs and symptoms of AFND following BCG vaccination. On the right thigh where BCG had been inoculated, she developed an erythematous, infiltrated ulcerated nodule. ESR was raised and there was associated leucocytosis with neutrophilia (74%). Histopathological study of one of the cutaneous nodules was typical of AFND. The patient was given potassium iodide, 900 mg/day. Within 48 hours the infiltration dramatically disappeared.

The present case shows an association between BCG and AFND. AFND had previously been reported in association with small pox vaccination and tuberculin scratch test. Cutaneous hyperreactivity to tuberculin test has been reported in patients with AFND. The authors conclude by suggesting that BCG vaccination should be mentioned as one of the factors that may trigger AFND.

K Pavithran

Immunopathogenesis of acute lepromatous uveitis; a case report, Murray PI, Muir MCK and Rabi AHS: Leprosy Rev, 1986; 57: 163-168.

Leprosy can involve the eyes and is responsible for blindness in about 55% of the cases. Uveitis in leprosy can be either a chronic anterior uveitis of neuroparalytic origin or an acute anterior uveitis of immune complex nature. The authors studied various immunological parameters like total lymphocyte count, T-lymphocytes, helper and suppressor T-lymphocytes, circulating immune complexes, serum antibodies and serum

immunoglobulins in a 60-year-old lepromatous leprosy patient during an episode of acute anterior uveitis and five months after the remission. They observed that the total number of T-lymphocytes were normal during and after the episode but the suppressor T-cell was decreased during the episode causing an increase in the helper: suppressor T-cell ratio. The reduction in the suppressor T-cell causes an increase in the helper T-cell activity giving rise to increased serum immunoglobulins and immune complexes. In this patient there was no increase in circulating immune complexes and this may be explained by the formation of immune complexes locally or intermittently during the disease process. The authors regard acute anterior uveitis of lepromatous leprosy as an intra-ocular component of erythema nodosum leprosum and speculate that it is an immune complex vasculitis precipitated by a reduction in the suppressor T-cell population.

Leelamma Jacob

Early warning skin signs in AIDS and persistent generalised lymphadenopathy, Muhlemann MF, Anderson MG, Paradinas FJ et al: Brit J Dermtol, 1986; 419-424.

The association of immune deficiency, opportunistic infections and Kaposi's sarcoma is well known in AIDS. The syndrome of persistent generalised lymphadenopathy (PGL) may in some cases progress to AIDS. The cutaneous manifestations of AIDS and PGL include Kaposi's sarcoma, fungal infections, chronic pyoderma, herpes zoster, mucocutaneous candidiasis, chronic ulcerative genital herpes simplex and seborrhoeic dermatitis. Immune complex vasculitis, folliculitis and xeroderma have recently been added to this list. Here the authors draw attention to some distinctive patterns of skin diseases they had seen in patients with AIDS and PGL and in patients with high risk of AIDS. They also assessed the prevalence of skin disease and of antibodies to HTLV-III in a population of male homosexuals.

The authors observed a chronic acneform folliculitis on the face, back, chest and buttocks, extensive cutaneous fungal infections and a striking neck and beard impetigo. These skin diseases were not present in asymptomatic male homosexual control subjects, 32% of whom were found to have antibodies to human T cell lymphotropic virus type III. The authors regard these dermatoses as early warning signs of AIDS.

K Pavithran

Changes in laboratory variables induced by isotretinoin treatment of acne, Michaelsson G, Vahlquist A, Mobacken H et al: Acta Dermato-Venereol, 1986; 66: 144-148.

Isotretinoin (13-cis retinoic acid) is now widely used in the treatment of acne. Its clinical side effects are many. But there are only a few reports on the influence of this drug on different laboratory variables. Here the authors report some changes in laboratory values observed by them during treatment of 90 patients with nodulocystic form of acne.

During the first 3 months of therapy, patients received isotretinoin in a dose of 0.5 mg/kg body weight, daily. Those who did not respond were given isotretinoin 0.75 mg/kg during the second 3-month period. The following measurements were made before and after 1, 3, 4 and 6 months of treatment: haemoglobin; total and differential leucocyte counts; platelet counts; serum creatinine, bilirubin, alanine aminotransferase (ALAT), aspartate aminotransferase (ASAT), alkaline phosphatase, cholesterol and triglyceride.

Results revealed that the concentration of haemoglobin decreased significantly during the first 3 months and it remained depressed even after that, in those who were receiving 0.75 mg/kg. The leucocyte count, particularly

the number of neutrophils, decreased significantly. In patients with good response, the mean WBC count fell by 24% and the neutrophils by 33%. The serum ALAT, ASAT, cholesterol and triglyceride levels also increased significantly. The observed changes were clearly both dose dependent and reversible.

K Pavithran

The free androgen index and mild hirsutism, Moses R, Archibald L, Egri S et al: Aust J Dermatol, 1986; 27: 27-28.

Testosterone is the most potent androgen but is elevated in only less than half the cases of hirsutism and often has a poor correlation with the clinical complaint of hirsutism. This is because only a small percentage of testosterore(T) is free and biologically active, while the majority is bound to sex hormone binding globulin (SHBG) or albumin. Recently it has been shown that a derived product, the free androgen index (FAI) may be abnormal in a group of hirsute patients when other androgen investigations are normal. Here the authors determined whether this discrimination applied to a group of women with mild hirsutism. Thirty five consecutive female patients presenting to an endocrine clinic with primary complaint of hirsutism were studied. The plasma testosterone was found to be abnormal in only 11% patients with mild hirsutism. The free androgen index (FAI) was determined by the formula, FAI = T n mol/L × 100 ÷ SHBG n mol/L. The results are expressed as mean ± 1 SD and statistical evaluation was carried out with the student t test. Result showed that FAI was abnormal in 66% of cases and this shows that FAI is a useful discriminating test of androgen excess in patients with mild hirsutism.

K Pavithran

Apoptosis in human epidermis: A postmortem study by light and electron microscopy, Lovas JGL: Aust J Dermatol, 1986; 27: 1-5.

The occurrence of apoptosis has been described in diverse cell types and conditions. An apoptotic keratinocyte shows nuclear pyknosis, eosinophilic condensation of the cytoplasm and apparent cytoplasmic retraction from the neighbouring keratinocytes. Here the author carried out a study to determine whether individual epithelial cell death (IECD) with morphological features of apoptosis occurred in postmortem human epidermis.

Samples of clinically normal skin from a sun-protected site were obtained from 106 autopsy cases. For the first time epithelial apoptosis was documented in postmortem skin and illustrated using light and electron micrographs. Apoptotic keratinocytes were observed by light microscopy to occur sporadically in 95 of the 106 cases. Elecron microscopic study of 25 EM blocks of 18 cases revealed 7 apoptotic keratinocytes.

The mechanism of apoptosis of keratinocytes after death of an individual is not understood. Experimentally-induced hypoxia has been shown to stimulate apoptotic activity in the liver. Here the author suggests that the hypoxia resulting from postmortem circulatory arrest is sufficient to stimulate apoptosis but insufficient to cause necrosis. When oxygen tension drops below a critical level, scattered individual keratinocytes actively self-destruct via apoptosis so that the remaining keratinocytes may receive an optimum level of oxygen. When oxygen level falls further, the entire epidermis will undergo necrolysis (autolysis).

K Pavithran

Itraconazole therapy in pityriasis versicolor, Hernanz ADP, Frias-Iniesta J, Gon-

zalezvalle O et al: Brit J Dermatol, 1986; 115: 217-225.

Pityriasis versicolor is the most common superficial mycotic disease world-wide and is caused by *Malassezia furfur.* It is usually treated with topical compounds like selenium sulphide, thiosulphate, keratolytic agents, propylene glycol and topical antifungals. Ketoconazole, an oral antifungal, though effective in this disease, is toxic to the liver. Itraconazole is a triazole derivative which is highly active in vitro against a wide range of fungi including *Pityrosporum* species. It is more potent than ketoconazole and has no significant toxicity. Here the authors report the results of a randomized open study of two treatment regimens with itraconazole in patients with extensive pityriasis versicolor.

Thirty patients were allocated randomly, on an open basis, to either regimen I (15 patients) which consisted of 200 mg daily of itraconazole taken at breakfast for 5 consecutive days, or regimen II (15 patients), which consisted of 100 mg daily of this drug for 10 consecutive days. At the assessment one day after the end of therapy, itching and erythema had disappeared in all patients in both groups. But mild scaling persisted in seven patients in group I and in 10 patients in group II. Almost all patients had a positive KOH test. Wood's light was also still positive in these patients, though the intensity of fluorescence was reduced. Three weeks after finishing therapy, 14 patients (93%) in group I and 13 patients (87%) in group II had responded to the therapy. Follow up at the end of three months showed no evidence of relapse in these patients. In most patients repigmentation had occurred. There were no significant adverse reactions to itraconazole. One patient had mild dyspeptic symptoms and another patient reported mild stomach ache for 1 hour following each dose. Itraconazole seems to be an effective agent for the treatment of pityriasis versicolor; however, optimum treatment schedules and more clinical experience with longer follow-up periods are required to determine the efficacy and safety of the drug.

K Pavithran

Transepithelial elimination of granulomas in cutaneous tuberculosis and sarcoidosis, Goette DK, Colonel MC and Odom RB: J Amer Acad Dermatol, 1986; 14: 126-128.

Mehregan in 1970 reported a group of dermatological disorders characterized by transepidermal elimination. It has also been observed in lichen nitidus, deep mycoses like chromoblastomycosis, blastomycosis, and coccidioidomycosis and in all necrobiotic granulomas (granuloma annulare, necrobiosis lipoidica and rheumatoid nodule). Authors have observed this phenomenon in tick-bite granuloma, suture granuloma, Monsel's solution induced granuloma and in acne keloidalis.

In this article authors report transepidermal elimination in one patient with disseminated tuberculosis and in another patient with sarcoidosis. It appears that the skin-can rid itself of a variety of foreign materials such as altered connective tissue, foreign bodies, and infectious organisms. Thus epidermis takes an excretory function, a phenomenon appropriately labelled as 'cutaneous catharsis'. Public health implication of transepithelial elimination lies in the fact that physicians, paramedical personnel and family members may be subjected to inoculation into traumatised skin while handling patients with infectious disorders who are displaying the transepidermal phenomenon.

K Pavithran

Cement burns: Rare or rarely reported? Fischer G and Commens C: Aust J Dermatol, 1986; 27: 8-10.

Contact with ready-mixed cement may cause acute irritant dermatitis with necrosis

and ulceration. The main constituent is calcium oxide (lime) which is usually present in a concentration of 60-67%. This lime is assumed to be the culprit for burn. Here, the authors report a 15-year-old boy who developed cement-burn on the knee, after kneeling for 5-10 minutes on ready-mixed cement. It required debridement and skin grafting later. The factors that predispose to development of cement burns are discussed. These include prolonged exposure, occlusion or pressure on skin, poor protective measures, delayed onset of pain and delayed diagnosis.

Cement burn is a preventable disorder. Use of appropriate protective clothing and early removal of cement that has contacted skin may prevent development of cement burns. Authors further recommend that manufacturers of ready-mixed cement should include on their packets a warning of the risks and advice on protective clothing.

K Pavithran

Longterm follow up of dermatitis herpetiformis in children, Ermacora E, Prampolini L, Tribbia G et al: J Amer Acad Dermatol, 1986; 15: 24-30.

A diagnosis of dermatitis herpetiformis was made in 76 children based on clinical features and by detection of granular IgA deposits in the papillary dermis of perilesional skin. 38% had intestinal symptoms while 90% had jejunal mucosal abnormality. These children were followed up for 3 to 10 years. A gluten-free diet was given to children with mucosal changes; while those without mucosal changes were treated with dapsone 0.5 to 2 mg/kg/day. A gluten-free diet alone reversed the intestinal abnormality in 100% of cases and disappearance of the rash in 82% of cases. Dapsone alone was effective for the rash but did not affect the intestinal alterations. The absence of side effects to dietic therapy makes diet the treatment of choice in this disease.

Mercy Paul

Evaluation of 'flagyl' therapy in the treatment of non-specific vaginosis, Dube S, Khanna S and Singh SP: J Obstet Gynaecol India, 1986; 36: 533-535.

Gardnerella-associated vaginitis also known as non-specific vaginitis is a disease commonly encountered in STD clinics. A variety of drugs have been reported to be effective in this condition. These include sulphonamide cream, tetracyclines, ampicillin and metronidazole. Here the authors in their study tried to evaluate the role of metronidazole therapy in 51 cases of non-specific vaginitis and compared its efficacy with oral ampicillin and oral doxycycline given in 50 patients each. Metronidazole was given in a dose of 400 mg thrice daily orally.

Before administration of drugs the diagnosis was confirmed by estimation of vaginal pH, and by microscopy of vaginal secretions. The patients were instructed to report for follow-up on the eighth day of therapy. Symptomatic cure along with the absence of clinical and microscopic evidence of non-specific vaginitis was considered as cure.

The results of this study once again confirmed the effectiveness of metronidazole in the treatment of non-specific vaginitis. 82.3% of patients who received metronidazole got cure of the disease compared to 32% and 38% in ampicillin and doxycycline treated patients. The role of metronidazole therapy is significant as non-specific vaginitis is always associated with anaerobic infection.

K Pavithran

Treatment of erosive lichen planus with dapsone, Bech H and Brandrup F: Acta Dermato-Venereol (Stockh), 1986; 66: 366-367.

Dapsone has been found to be effective in the treatment of many dermatoses characterised by accumulation of polymorphonuclear leucocytes in the skin.

Here, the authors report a 74-year-old woman who had typical lichen planus lesions on the skin and erosions in the oral mucosa. Recent report on effectiveness of dapsone in the treatment of lichen planus made the authors try dapsone in this case. Dapsone was started in a dose of 50 mg daily and gradually increased to 150 mg daily. After 7 months' treatment the lesions on the buccal mucosa and toes completely healed. the itching also had disappeared.

Dapsone has been suggested to act in conditions like dermatitis herpetiformis, by its ability to inhibit the polymorphonuclear leucocyte toxicity. But in lichen planus the predominant cells in the cutaneous infiltrate are lymphocytes. Authors suggest that here also dapsone may be acting by inhibition of the myeloperoxidase-hydrogen peroxide cytotoxic system. Further-more, an inhibition of the release of inflammatory and/or chemotactic factors from mast cells might be of importance. They further suggest that dapsone may be useful in severe cases of erosive lichen planus, when short courses of systemic steroids have failed to induce prolonged remissions.

K Pavithran

DR. I. S. PASRICHA
Professor
Department of Dermatology Venereology
All India Institute of Medical Sciences
New Delhi-110029 (India)