Indian J Dermatol Venereol Leprol 1987; 53 : 133-140

ABSTRACTS FROM CURRENT LITERATURE

Tinea infection histologically simulating eosinophilic pustular folliculitis, Kuo TT, Chens Y and Chan HL : J Cut Pathol, 1986; 13 : 118-122.

A case of tinea infection which simulated Ofugi's disease (eosinophilic pustular folliculitis) histologically is reported in a one-year-old Chinese boy. Clinically, the lesion was diagnosed as granuloma annulare and biopsy showed a histopathologic picture of eosinophilic pustular folliculitis. Gomori's methenamine silver stain revealed fungal hyphae in the horny layer and in the hair canal. There was no blood eosinophilia. Scraping for fungus was done after obtaining the histopathological report and fungal hyphae were detected. The patient responded to topical miconazole cream. This shows that tinea infection can simulate Ofugi's disease and a fungal stain is advisable to avoid the possible confusion.

N Surendran Pillai

The significance of an IgM band at the dermo-epidermal junction, Wojnarowska F, Bhogal B and Black MM : J Cut Pathol, 1986; 13 : 359-362.

A total of 190 patients with an IgM band at the basement membrane zone were studied in order to determine the significance of this finding. Immunofluorescence findings were analysed as to the pattern of IgM band and the presence of other immunoglobulins, C3 or fibrinogen at the basement membrane zone. The final diagnosis for the purpose of study was based on clinical criteria, histopathological findings and appropriate estimation of anti-DNA antibodies. The results of the studies show that the presence of an IgM band at the basement membrane zone is not diagnostic of lupus erythematosus. An IgM band at the basement membrane zone was associated with a diagnosis of lupus erythematosus in only 55% of patients. In the other 45%, it was associated with a variety of other dermatoses, like bullous dermatoses, eczema, scarring alopecia, acne, rosacea and perioral dermatitis, non-lupus collagen vascular diseases, Jessner's lymphocytic infiltrate, vasculitis, lichen planus, chillblains and some other dermatoses. The presence of IgM band at the basement membrane zone should be correlated with clinical, histological and serological evidence for making a diagnosis of lupus erythematosus.

N Surendran Pillai

The diagnosis and treatment of chancroid, Nicolas J, Fiumara NJ, Rothman K et al : J Amer Acad Dermatol, 1986; 15 : 939-943.

The diagnosis of chancroid is made from the clinical features based principally on the morphology of the lesion(s). Three cases are described in detail, illustrating the morphologic characteristics of the disease, diagnostic laboratory tests and treatment. All patients were suspected of having chancroid and were subjected to the following laboratory tests : (1) Gram stain of smear from the edge of ulcer for Gram negative bacilli in a school-of-fish arrangement. (2) Inoculation of enhanced chocolate agar-vancomycin (ECA-V) medium. (3) Tzanck test looking for multinucleated giant cells, to exclude herpes simplex. (4) A smear from the ulcer for direct fluorescent antibody tests with monoclonal antibodies. (Not available commercially).

(5) Urethral smear and culture for gonorrhoea. (6) A direct fluorescent antibody test for chlamydia from a urethral smear. (7) The rapid plasma reagin circle card test (RPR-CT).

Gram stained smears were positive in all the three cases. Culture was positive in only one case. The organism required high humidity and 33° to 35°C temperature incubation for one week before discarding as negative, because it is a slow-growing fastidious organism. All other tests were negative in all the three cases. The treatment of choice is either erythromycin 500 mg four times daily orally for 14 days or co-trimoxazole one double strength tablet every 12 hours for 14 days. In women, the disease may be asymptomatic which indicates that prophylactic treatment should be given to contacts. In the three cases reported, co-trimoxazole was effective in the above dosage given for 14 days for two patients and for 21 days for the third case who developed a bubo which was aspirated through healthy skin above fluctuation under local anaesthesia.

N Surendran Pillai

Hansen's disease following lymphoma, Levy ML, Rosen T, Tschen JA et al : J Amer Acad Dermatol, 1986; 15 : 204-208.

Infection is an important complication in patients with malignancy but leprosy is not a common infection in such patients. Authors report the development of Hansen's disease in two patients with lymphoma. Granulomatous lesions have been reported in patients with lymphoma as a part of the disease. So before labelling any granulomatous lesion as a part of the disease, one should do special stain for *Mycobacterium leprae* and culture if possible to rule out Hansen's disease in patients with lymphoma.

Leelamma Jacob

Leukaemic macrocheilitis associated with hairy cell leukaemia and the Melkersson-Rosenthal syndrome, Connelly TJ, Kauh YC, Luscombe HA et al : J Amer Acad Dermatol, 1986; 14 : 353-358.

Authours report the development of Bell's palsy, plication of the tongue and non-pitting oedema of the upper lip in a patient with hairy cell leukaemia. Histopathology and histochemical examination of the tissue from the lip was consistent with hairy cell leukaemia. Specific leukaemic infiltrates may develop as a Koebner-like phenomenon in areas of injury or inflammation. The authors speculate that the leukaemic macrocheilitis in their patient may be a Koebner-like reaction induced by the pathologic process of Melkersson-Rosenthal syndrome.

Leelamma Jacob

Association between acrochordons and colonic polyps, Beitler MBA, Eng ABA, Kilgour MAB et al : J Amer Acad Dermatol, 1986; 14 : 1042-1043.

Fifty four patients with suspected colonic disease were examined independantly by dermatologist and colonoscopist for the presence of acrochordons and polyps respectively. Among the 54 patients, 35 (65%) were found to have skin tags and 19 (35%) were negative for skin tags. Of the 35 patients with skin tags, 24 (69%) had colonic polyps, whereas only 4 (21%) out of 19 patients without skin tags were suffering from colonic polyps. Thus the relative risk for the presence of colonic polyps in patients with skin tags was 3.3 times higher than in those patients without skin tags. The sensitivity was 86% and specificity was 58%. They conclude that the skin tags may be a cutaneous marker of adenomatous polyps in patients with suspected colonic disease but the significance of skin tags in patients without any colonic disease remains to be determined.

Leelamma Jacob

Oral acyclovir for the prevention of herpes-associated erythema multiforme, Lemak, Duvie M and Bean SF: J Amer Acad Dermatol, 1986; 15 : 50-54.

Recurrent herpes simplex virus infection due to both type I and type II virus is an important cause of erythema multiforme. The skin lesions develop 1 to 3 weeks after an episode of recurrent herpes simplex virus infection. Authors report the effectiveness of oral acyclovir in four patients with herpes-associated erythema multiforme of long duration without any side effects. They believe that oral acyclovir, an effective and a safe drug, will become the drug of choice for the treatment and prevention of herpes-associated erythema multiforme.

Leelamma Jacob

Livedo reticularis and purpura : Presenting features in fulminant pneumococcal septicaemia in an asplenic patient, Rusonis PA, Robinson HN, Lamberg SI et al: J Amer Acad Dermatol, 1986; 15 : 1120-1122.

Pneumococcal septicaemia presenting with purpura, livedo reticularis, acrocyanosis and disseminated intravascular coagulation in an asplenic, non-immuno-compromised patient is reported. Livedo reticularis can occur either as an idiopathic disturbance or as an associated phenomenon of an underlying disease like connective tissue disease, haematological, neoplastic and infectious disease. After splenectomy, there is an increased risk of pneumococcal blood borne infection. This is due to the impaired clearance of particulate antigen and to the defective IgM antibody production. The mortality rate in asplenic patients vary from 50-90%. Early recognition of the infectious agent by Gram stain of buffy coat and by blood culture and rapid initiation of appropriate antibiotic therapy can be life-saving.

Mollykutty Francis

Response of varicella-zoster virus and herpes zoster to silver sulfadiazine, Montes LF, Muchinik G and Fox CL: Cutis, 1986; 38 : 363-365.

The effect of silver sulfadiazine on varicella-zoster virus in vitro and in vivo was studied. Addition of silver sulfadiazine to cultures of varicella-zoster virus at a concentration of 10 ug/ml or higher resulted in viral inactivation in 30 minutes. Forty two patients with herpes zoster were treated with 1% silver sulfadiazine 4 times daily. The therapeutic response was apparent in 24 hours. The earlier the treatment was started, the more dramatic was the response. When treated early, vesicles failed to develop on areas of erythema. Within 24-72 hours there was complete drying of the vesicles and a marked decrease of erythema and oedema and a significant control of pain and burning sensation. A rapid epithelisation and a remarkable decrease in residual cutaneous changes were also observed. The post-herpetic neuralgia was either mild or absent. No toxicity was observed. The inhibitory action of silver sulfadiazine is thought to be due to the presence of silver ion.

Mollykutty Francis

Modified TALC colour change medium for the identification of Ureaplasma urealyticum, Deodhar LP and Gogate AS: Indian J Pathol Microbiol, 1986; 29 : 233-235.

The most sensitive method for the isolation of *Ureaplasma urealyticum* is inoculation of the specimen into the liquid medium and subculture to liquid and agar media. The unique ability to hydrolyse urea helps to differentiate it from mycoplasma. The original TALC colour changing medium described by Young et al consists of trimethoprim, amphotericin B, lincomycin and colistin. Here a modified medium is used where the easily available

ampicillin and penicillin are substituted for lincomycin and colistin. Both antibacterial agents have no action on mycoplasma. A colour change from yellow to red in the liquid medium was observed from the 2nd-10th day of inoculation. This is especially useful when the colonies fail to develop on agar media.

Mollykutty Francis

Survival of treponemes after treatment: comments, clinical conclusion and recommendations, Eric MCD: Genito-Urin Med, 1985; 61 : 293-301.

Treponemes may persist after treatment that has been accepted as effective. Neurological signs may progress in some patients treated with a standard dose of soluble penicillin and any dose of benzathine penicillin (even with added probenecid). The standard dose of procaine penicillin for uncomplicated early syphilis is 600,000 IU intramuscularly daily for 10 days. According to these authors, benzathine penicillin is given only when standard treatment with procaine penicillin cannot be given. In patients with neurosyphilis, in addition to the procaine penicillin injection probenecid also should be given by mouth and treatment should be continued for 17-21 days. Benzathine penicillin should not be used for the treatment of neurosyphilis or iritis of late syphilis including that accompanying interstitial keratitis. Treatment for interstitial keratitis should initially be as for neurosyphilis but in recurrent cases treatment may have to be prolonged. Patients allergic to penicillin should be treated with doxycycline, erythromycin or cephalosporin. Cephalosporins can be used in penicillin allergic patients who have not developed anaphylactic reaction.

K Sobhanakumari

Antimicrobial activity of seven metallic compounds against PPNG and non-PPNG, Peeters M, Vanden B and Meheus A: Genito-Urin Med, 1986; 62 : 163-165.

In vitro activity of seven metallic compounds was tested against PPNG and non-PPNG strains. On weight basis, mercurials showed the greatest in vitro activity. Phenyl mercuric borate, thiomersal and mercuric chloride inhibited 90% of all strains at concentration of 5 mg/L 5 mg/L and 20 mg/L respectively. Silver nitrate inhibited 90% of all strains at concentration of 80 mg/L. Copper and selenium salts had lower in vitro activity, inhibiting 90% of all strains at 320 mg/L and 640 mg/L respectively. Silver nitrate and six other compounds tested showed equal activities against PPNG and non-PPNG. These findings support the recommendations for prophylaxis of gonococcal conjunctivitis of the new born with 1% silver nitrate eye drops.

K Sobhanakumari

Single dose oral amoxycillin 3 gm with either 125 mg or 250 mg clavulanic acid to treat uncomplicated gonorrhoea, Lawrence AG and Shanson DC: Genito-Urin Med, 1985; 6 : 168-171.

A single supervised oral dose of amoxycillin 3 gm combined with clavulanic acid 125 mg as a suspension (Augmentin 3.125 gm) plus probenecid 1 gm, cured 97 out of 100 assessable patients who had uncomplicated ano-genital gonorrhoea. Thirteen of the hundred patients were infected with PPNG strains and out of this, 11 (85%) patients were cured including one infected with a PPNG strain that was resistant to spectinomycin also. In another group of 93 assessable patients treated with ampicillin 3 gm plus probenecid 1 gm, only 85 (91%) patients were cured. Among the eight treatment failures in this group, five were found to be infected with PPNG strains. In a second study, 144 assessable patients treated with amoxycillin 3 gm combined with

clavulanic acid 250 mg (Augmentin 3.25 gm) plus probenecid 1 gm showed 97% cure rate. Five of seven (71%) patients infected with PPNG strains were cured. So Augmentin regimens are effective for treating gonorrhoea caused by PPNG and non-PPNG strains.

K Sobhanakumari

Hyperbaric oxygen treatment of toxic epidermal necrolysis, Ruocco V, Bimonte D, Luongo C et al: Cutis, 1986; 38 : 267-271.

Hyperbaric oxygen therapy has been reported to be beneficial in extensive burns and in the management of diseases with an underlying immune disorder such as pemphigus vulgaris, systemic sclerosis, pyoderma gangrenosum and multiple sclerosis. The clinical features and physiological changes that occur in extensive burns and toxic epidermal necrolysis are almost similar. Here the authors used hyperbaric oxygen alone in the treatment of three patients with drug-induced toxic epidermal necrolysis (TEN). The therapy was performed in a pressure chamber with pure oxygen at 2 atm for 60 to 120 minutes once daily. Sloughing of the necrotic tissue and re-epithelization of extensive areas of denuded dermis occurred with surprising rapidity during treatment.

Hyperbaric oxgygen increases peripheral vascular resistance and thus exerts its antishock action. It promotes sloughing of necrotic tissue, enhances dermal metabolism and reduces re-epithelization time. By inhibiting bacterial growth and by inactivating bacterial toxins, it exerts its antiseptic action also.

K Pavithran

Single-dose ceftriaxone therapy of gonococcal ophthalmia neonatorum, Haase D, Nash RA, Nsanze H et al: Sex Trans Dis, 1986; 13 : 53-55.

Ophthalmia neonatorum is still a major health problem in less-developed countries. Unless treated adequately and promptly, the morbidity caused by it is great. Penicillin-resistance due to penicillinase-producing *Neisseria gonorrhoeae* is being reported with increasing frequency in many parts of the world. Intrinsic resistance to penicillin not mediated by penicillinase is also increasing. So alternative effective therapy for gonococcal ophthalmia neonatorum is necessary.

Here the authors report results of an open study involving treatment of smear positive gonococcal ophthalmia neonatorum with ceftriaxone (125 mg) given as a single intramuscular dose without topical therapy. Gonococci were isolated from the eyes of 6 infants and four of these isolates were penicillinase-producing strains. All infants when seen at follow-up, showed marked clinical improvement. Two infants had persistent ophthalmia due to *Chlamydia trachomatis*. Follow-up eye cultures for *N. gonorrhoeae* were all negative.

Ceftriaxone due to its longer half-life causes prolonged bactericidal level of the drug in the conjunctival sac, making the topical therapy unnecessary. Drugs commonly used to treat infection with PPNG such as gentamicin and kanamycin are toxic and need multiple-dose therapy. But ceftriaxone is less toxic in infants and is an effective antimicrobial agent of single dose therapy for ophthalmia neonatorum due to penicillinase producing and non-penicillinase producing gonococci.

K Pavithran

Caterpillar and moth dermatitis, Burnett JW, Calton GJ and Morgan RJ: Cutis, 1986; 37 : 320.

Several species of American moths and caterpillars are venomous. Rarely they may

cause epidemics of moth dermatitis. The surface of moths and caterpillars contains many fine hairs called setae. Each is associated with a venom gland at its base. Two types of setae are recognised, one as a straight structure and the other with an easily rupturable articulation near its tip. Setae probably are chitinous structures containing proteinaceous venoms that may include histamine. After contact, the patient develops local burning followed by painful eruption 8-12 hours later. The eruption may be linear and consists of wheals, papules or pustules and may be eczematous with a mild haemorrhagic component. Venoms of some species can cause severe systemic toxicity and even death. Generalised bleeding tendency has been observed in some. A basic fibrinolysin has been isolated from haemolymph, saliva and hair secretions of some caterpillars. The exact mechanism of cutaneous eruption is not known. Complement and immunoglobulin deposits are not seen in cutaneous lesions. Patch test results with setae are inconstantly positive. Local treatment consists of removal of setae by repeated stripping of the skin with adhesive tape, application of compresses, mentholated emollients or corticosteroid and systemic antihistamines. Severe cases can be treated with systemic corticosteroids.

K Pavithran

Tissue distribution of aromatic retinoid (etretinate) in three autopsy cases: Drug accumulation in adrenals and fat, Vahlquist A, Rollman O and Pihl-Lundin I: Acta Dermato-Venereol, 1986; 66 : 431-434.

Etretinate is now-a-days widely used in the treatment of various dermatological disorders. But the use of the drug in clinical practice is complicated by several untoward effects. The studies of human biopsy material have shown that the compound accumulates in subcutaneous fat. This problematic storage of etretinate in fat tissue during chronic etretinate therapy prompted the authors to search for other high affinity tissues in 3 patients studied at autopsy. Eleven organs were analysed for etretinate and its main metabolite, etretin, by high performance liquid chromatography. Accumulation of etretinate was found in fat, liver, adrenals, kidneys, brain and testis. Although the storage in fat sufficiently explains the long biological half-life of the drug, the accumulation of etretinate in the adrenals may have other important implications. Etretin, the less lipophilic metabolite of etretinate, did not accumulate except in liver and gut. So it justifies the recent efforts to replace etretinate with etretin as a therapeutic agent.

K Pavithran

Pigmentary demarcation lines during pregnancy, Vazquez M, Ibanex MI and Sanchez JL: Cutis, 1986; 38 : 263-266.

Natural pigmentary demarcation lines may occur in some normal people especially in dark-skinned persons, between highly pigmented and less pigmented areas of the skin. Five patterns have been described. The one that extends in a linear pattern on the back of thigh and leg is classified as group B. Some consider these lines as atavistic and coincide with the marginal lines of cutaneous nerve distribution. A dominant mode of inheritance has also been suggested.

Here the authors report development of linear pigmentary lines closely simulating the ones described as natural pigmentary demarcation lines in four women during pregnancy. These lines faded in the post-partum period. Histopathological study revealed no abnormality except for an increased pigmentation of the basal layer.

Pigmentary changes that are known to occur during pregnancy are linea nigra, melasma and increased pigmentation of the genitalia, areolae, nipples, recent scars, and

nevi. Melanocyte stimulating hormone, together with oestrogen and progesterone probably are responsible for the pigmentary changes during pregnancy. Authors here have added another pigmentary disorder of pregnancy to the already existing list.

K Pavithran

The clinical characteristics and course of adult gonococcal conjunctivitis, Wan WL, Farkas, GC, May WN et al: Amer J Ophthal, 1986; 102 : 575-583.

Despite the overall frequency of gonococcal infections, ocular involvement especially in adults is rare. Adult gonococcal conjunctivitis is most frequently transmitted by direct or manual contact with infected urine or genital secretions. It is now recommended that all patients with gonococcal conjunctivitis be treated with hospitalization and a five-day course of high doses of parenterally administered antibiotics. Hence the authors in a retrospective study of 21 adults evaluated the clinical characteristics, course and outcome of gonococcal conjunctivitis.

Male patients (81%) between 20 and 26 years of age (67%) were predominantly affected. More than one half of the patients had signs and symptoms of genito-urinary gonorrhoea; nine of these had genital cultures positive for gonorrhoea. The Gram stain was highly sensitive. Thirty eight percent of the patients had bilateral eye involvement. Fifty four percent had initial visual acuity of 20/40 or better, but 3 had less than 20/200 visual acuity. The degree of corneal involvement was highly variable. Two had perforating ulcerative keratitis. Twenty one patients had severe conjunctival inflammation with copious purulent or mucopurulent discharge. Eighteen patients were treated after hospitalization, with intravenous aqueous penicillin G 4 to 20 million units daily in divided doses. Two patients with perforating keratitis were treated with IV ampicillin or IV gentamicin. Except in two patients with ulcerative keratitis, treatment was highly effective and reversed the course of infection and prevented significant visual loss.

K Pavithran

Localized cicatricial pemphigoid (Brunsting-Perry syndrome), Gibson V, Tschen JA and Bean SF: Cutis, 1986; 38 : 252-253.

Localized cicatricial pemphigoid as a clinical entity was first described by Brunsting and Perry in 1957. Subsequently, only a few cases have been reported. Though originally the disorder was thought to be an entity distinct from previously described bullous diseases, later reports and immunologic studies confirmed that localized cicatricial pemphigoid is related to but clinically distinct from benign mucous membrane pemphigoid.

Here the authors report a case of localized cicatricial pemphigoid on the scalp in a 35-year-old man. He gave history of non-traumatic scalp blisters leading to atrophic depigmented patches of alopecia. Even at the time of examination, there were a few vesicles and bullae at the periphery of the lesion. Histopathology revealed subepidermal bulla. Dermal papillae were well preserved. Results of immunofluorescent studies showed linear staining of basement membrane zone with antiserum IgG, IgA and C3. It is suggested that the occurrence of IgA at the basement membrane zone is justification for differentiating cicatricial pemphigoid from localized cicatricial pemphigoid. Other differentiating features include a low incidence of circulating basement membrane zone antibodies and negative findings on immunofluorescent studies in uninvolved skin. Treatment includes topical steroid and oral dapsone.

K Pavithran

Generalised pustular psoriasis precipitated by trazodone in the treatment of depression, Barth JH and Baker H: Brit J Dermatol, 1986; 115 : 629-630.

Generalised pustular psoriasis may be precipitated by various drugs like salicylates, iodide, phenyl-and oxyphenbutazone, progesterone, lithium and propranolol. Here the authors report a case of generalised pustular psoriasis precipitated by trazodone. A 37-year-old man had psoriasis for 19 years. He had treatment recently with trazodone hydrochloride for depression. Seventeen days after receiving this drug, his skin lesions worsened and evolved into generalised pustular psoriasis. Trazodone was stopped and he was treated conservatively. The fever and erythroderma settled, but on reintroduction of trazodone therapy, he again developed generalised pustular psoriasis.

This report emphasizes the need for caution when planning treatment of the psoriatic with depression. The commonly used drug for depression, lithium, is well known to aggravate psoriasis and may precipitate generalised pustular psoriasis, possibly by interfering with the cyclic nucleotide axis, The precipitation of generalised pustular psoriasis by a serotonin antagonist-trazodone, suggests that an alternative mechanism may be involved.

K Pavithran