ABSTRACTS FROM CURRENT LITERATURE

Intradermal methylene blue for the treatment of intractableidiopathic pruritus-ani. Farour F, Lee PWR. Br J Surg 1997;84: 670.

Symptoms of idiopathic pruritus ani may remain severe despite treatment. Usual modalitiies of treatment include local anaesthetic agents, intralesional steroids and cryotherapy.

Results of intradermal methylene blue in patients with pruritus ani resistant to the usual modalities of treatment are discussed.

Six consecutive patients were given 10ml of 1% methylene blue mixed with 7.5ml of 0.25% marcain with adrenaline 1:200,000, 7.5ml of 0.5% marcain and 5ml of 0.9% sodium chloride via a 22G spinal needle. This was infiltrated intradermally along the skin furrows under general anaesthesia.

In five cases there was substantial reduction in symptoms after treatment with marked regression of the associated skin changes. All patients reported numb sensation in the perianal region following the procedure. The median duration of follow up was 2-5 years. Three patients had a second injection of methylene blue for recurrence of symptoms of 1,3 and 5 years.

Initial studies had shown the procedure to be associated with skin necrosis. But in this study it was not associated with any necrosis as the volume of methylene blue and local anaesthetic used was small.

Electron microscopy showed destruction of dermal nerve endings. This is postulated to be the mechanism by which pruritus is relieved.

Sribiju

The acquisition of herpes simplex virus during pregnancy . Brown ZA, Selke s, Zen J, et a1.N Eng J Med 1997;337: 509-515.

The prevalence of genital infection with herpes simplex virus(HSV) and its most serious complication, neonatal herpes, has also increased during the past two decades. The consequences of neonatal infection with HSV are frequently catastrophic leading to death or severe neurological disability in the neonates. Various studies suggested that genital HSV infection acquired during pregnancy is associated with preterm labour, intrauterine growth retardation and spontaneous abortion. Here the authors used serologic and virologic methods to study the acquisition of HSV infection among pregnant women.

Seven thousand and forty-six pregnant women whom serological tests

showed to be at risk for HSV infection were included in the study. The blood samples were collected at the first prenatal visit, 14-18 weeks, 24-28 weeks and during labour for testing antibodies to HSV-1 and HSV-2 by Western blot assay, and rate and time of seroconversion were calculated. Ninety-four women became seropositive for HSV which was about 2.1%. Seroc onversion among initially seronegative women was 3.7%,among HSV-1 seropositive women 1.7% become seropositive for HSV-2. Among the 94, who became seropositive, 64% had subclinical infection. All 26 who had clinical infection with HSV-2 and 6 out of 8 with HSV-1 infection had genital ulcers. Among those with symptomatic infection, 21% had it in the first trimester, 44% and 35% in second and third trimester respectively. In women with subclinical infection, 30% had it in the first, 30% in second and 40% in third trimester, suggesting a uniform risk throughout pregnancy. There were no significant differences in the frequency of complications in the new born between women who had seroconverted during pregnancy and those who did not. Nine women who acquired infection near the onset of labour did not develop antibodies at the time of labour. Four neonates born to these women had neonatal herpes suggesting a protective role for the type specific antibodies. This study suggests that efforts to reduce neonatal herpes should concentrate on preventing the maternal acquisition of both HSV-1 and HSV-2 in the latter part of pregnancy.

Shailaja T V

Intralesional bleomycin mediatedelectrochemotherapy in 20 patients with basal cell carcinoma. Glass LF, Jaroszeski, Gilbert R, et al. J Am Acad Dermatol 1997; 37: 596-599.

Treatment modalities for basal cell carcinoma include simple excision. Mohs micrographic surgery, electrodessication and curettage, cryosurgery and radiation therapy. A new anticancer therapy, electrochemotherapy has been introduced, that entails exposing the cancerous cells to short pulses of electricity during chemotherapy. This enhances cytotoxicity by increasing the cell permeability which in turn results in tumour cell lysis. This study was undertaken to report the effects of electrochemotherapy in 20 patients with primary basal cell carcinoma. After administration of intralesional bleomycin, electrical pulses were delivered to 54 tumour sites. The treatment sites excised 4-5 weeks later showed only a scar. Two weeks after therapy, the histopathological appearance consisted of cutaneous ulceration and scale-crust formation, but no tumour. Lesions receiving intralesional bleomycin alone without pulses showed necrosis of individual keratinocytes within the epidermis

and surface adnexal epithelium but no necrosis of tumour cells. No histopathological alterations were noted in the lesions treated with electrical pulses alone. Complete responses were observed in the lesions subjected to electrochemotherapy in 53(98%) and in the majority of these (94%) after a single treatment. Thus the study concludes that electrochemotherapy appears to be an effective alternative to surgical excision for the treatment of primary basal cell carcinoma.

Bindu TR

Recent development in the treatment of atopic eczema. Brehler R, Hildebrand A, Luger T. J Am Acad Dermatol 1997; 36 : 983-994.

Atopic determatitis is a common, chronically relapsing skin disease with a genetic predisposition and unknown cause. The recent therapeutic approaches in the management of severe atopic dermatitis (AD) are discussed.

Phototherapy with UVB, UVA, combination of UVA and UVB and photochemotherapy can be used to treat atopic dermatitis. Bath PUVA, balneophototherapy and extracorporeal UVA photopheresis have also been found successful. Immunosuppressive therapy with cyclosporine in a dose of 4mg/kg/day for four to eight weeks followed by a maintanance dose of 0.5 to 0.7mg/Kg daily, and with topical tacrolimus or FK 506 are found to be effective. Cytokines like interferon (IFN)) alpha and gamma were tried in the treatment of AD. While response to IFN-alpha was not encouraging, IFN gamma in a dose of 100microgram thrice weekly for five weeks showed an improvement of 100% in one study. Interleukin-2,subcutaneous administration of soluble interleukin-1 receptor to neutralise interleukin-1 are other modalities suggested. Thymopentin, a synthetic pentapeptide derived from thymic hormone thymopoietin is found to enhance production of cytokines IL-2 and IFN-gamma. It was found to be effective in a dose of 50mg thrice weekly for six weeks. Desensitisation with extracts of airborne allergens that attenuate the cutaneous late phase response to aeroallergens appears to be a promising treatment of AD. Immunotherapy using allergen derived peptides containing T cell specific epitopes, which bypass professional antigen presenting cells, leading to tolerance of T lymphocytes and induction of energy have also been tried. Experimental therapies include Chinese herbal therapy, gamma-linolenic acid supplementation, phosphodiesterase inhibitors, mast cell stabilising agents and topical IgG con-

taining specific antimicrobial antibodies. Although the results obtained with phototherapy, immunosuppressive drugs and cytokines are encouraging, there is still no therapy of choice for AD, and there are no means to predict that certain patients would have a favourable response to one of these therapeutic strategies.

Bindu V

Treatment of genital warts with an immune response modifier (imiquimod).
Beutner KR, Spruance LS, Hougham AJ, et al, J Am Acad Dermatol 1998; 38: 230-239.

This is the report of a study conducted to determine the safety and efficacy of a new immune response modifier imiquimod for the treatment of genital warts. It was a double-blind placebo-controlled study done at 3 centres on 108 patients with external anogenital warts. By random selection, 57 of them were given 5% imiquimod cream and the rest 51, a placebo cream. They were asked to apply the cream three days a week for 8 weeks. The patients were then followed up for 10 more weeks.

Forty percent of the imiquimod group had their warts cleared completely while none in the placebo group had complete clearance. In the imiquimod group, 76% had more than 50% reduction in wart size compared to only 8% in the placebo group. Nineteen percent of those who had complete clearance showed a recurrence. Local reactions such as itching, erythema, burning, irritation and ulceration were considerably more in the imiquimod group than in the placebo group. They were mild to moderate and there were no systemic side-effects.

The study concluded that topical application of 5% imiquimod cream is safe and effective for the treatment of external genital warts.

Anoop U.