Correspondence

Penile ulceration in Crohn's disease

SIR,—We read with interest the well documented cases of penile ulceration by Slaney *et al* (*Gut* 1986; 27: 329). We wish to describe a case of pyoderma gangrenosum affecting the penis in a patient with Crohn's disease, which had certain similarities. A 46 year old man presented with a few months history of bloody diarrhoea. A barium enema showed characteristic features of Crohn's disease affecting the transverse and descending colon with skip lesions. A small bowel enema was normal. He was treated with prednisolone and sulphasalazine and made a good recovery. Six months later he developed a discharging punched out ulcer on the skin in the interscapular area. The ulcer had typical features of a pyoderma gangrenosum which was confirmed by histology and responded to a local injection of Triamcinolone. At the same time he developed a rapidly enlarging tender nodular lesion on the dorsum of his penis which was excised. Histology showed granulation tissue and the excision resulted in a large ulcer similar to that shown in Fig. 3 of the article by Slaney *et al*. There was no serological or cytological evidence for a sexually transmitted disease. As the ulcer was discharging seropurulent material, was tender and unresponsive to local antibiotics and topical steroids, a six weeks course of oral prednisolone was given. This resulted in a complete healing of the ulcer. Two months later, however, he developed another nodular lesion at the junction of the glans and the shaft of the penis which was also excised. Histology showed typical features of pyoderma gangrenosum. The excision resulted in an ulcer which once again was refractory to topical treatment. In addition, he developed an indurated area 1 cm distal to the ulcer. These lesions failed to heal over the next four months in spite of treatment with oral prednisolone, supplemented later with azathioprine, but healed completely within six weeks of the injection of 2 mg Triamcinolone between the two lesions. During this period, his colitis was in remission. Eighteen months later he remains well and has had no further recurrence of his penile lesions.

Our patient shows some differences from the two reported by Slaney *et al*, although the clinical presentation was similar to that of case 2. Firstly, the penile lesion was a pyoderma gangrenosum rather than an epithelioid granuloma. Secondly, the ulcer did not respond to topical steroids but initially healed with oral steroids and a recurrence healed only after local injection of a corticosteroid drug. As

both the skin and the penile lesions responded dramatically to local steroid injections, this route of giving steroids should be considered for treating these lesions when topical steroids fail.

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Measurement of intraepithelial lymphocytes

SIR,—In the introduction to the paper by Ferguson and Ziegler (*Gut* 1986, 27: 675–9) the authors correctly state that in the mucosa of untreated coeliac disease the actual number of intraepithelial lymphocytes (IEL) when measured by accurate morphometric methods¹ is not increased. This was first shown by Guix *et al*² and subsequently confirmed by Marsh.³ Because the surface epithelial volume in coeliac disease is markedly decreased by the disease process a normal IEL population would appear falsely as an increase. Therefore because the authors persist in expressing IEL in units of 100 surface epithelial cells instead of against the whole epithelial volume, as determined by an unaltered mucosal parameter such as the muscularis mucosa, they must erroneously continue to refer to 'high' IEL counts. This is clearly confusing the issue and detracts from their principal claim, which is, that IEL mitoses are not specific for coeliac disease. It should also be said that with the inadequacy of the method used, because of the concentration of a normal or reduced number of lymphocytes in a markedly decreased volume of surface epithelium, mitoses even if occurring at the normal rate, would appear to be more common in the surface epithelium of coeliac disease.

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References

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- 3 Marsh MN. Studies of intestinal lymphoid tissue III. Quantitative analysis of epithelial lymphocytes in the small intestine of control subjects of patients with coeliac sprue. *Gastroenterology* 1980; 79: 481–92.