Since the efficacy of Trasylol is claimed to depend largely upon the trypsin-inhibitory capacity of the preparation, we should like to offer some relevant observations. *In-vitro* studies in this laboratory indicate that whether one measures the proteolytic or the esterase activity of the enzyme 1,000 units of Trasylol inhibit at most approximately 1 mg. of crystalline bovine trypsin and its equivalent in human ileal fluid. This is roughly half the inhibitory capacity claimed by the manufacturers, and there were wide differences observed between two batches of Trasylol. The total daily output of trypsin in the human subject computed from analyses we have carried out on collections of faeces and ileal contents has a mean value equivalent to 125 mg. of bovine crystalline trypsin with a range of up to 228 mg. Thus, 12,500 units of Trasylol administered daily would inhibit no more than 10% of the average daily output of trypsin. Yet the initial reports in which enthusiastic claims were made for the efficacy of this preparation in acute pancreatitis were based upon just such a dosage.[1-3]

The manufacturers now recommend that the drug be administered in a dosage of 25,000 to 200,000 units per day. This is in line with the recommendations of Moshal *et al.*,[4] who carried out a thorough laboratory analysis of Trasylol and reported *in-vitro* inhibition of trypsin that was very much less than that found with either of the two batches we have tested.

Although we have as yet no evidence on this point, it is reasonable to infer that the pancreas is unlikely to contain less than that amount of trypsin which it is capable of secreting per day, albeit this in the normal gland is present in the form of the inactive zymogen. On this basis we suggest that 125,000 units of Trasylol per day would be required to inhibit pancreatic autodigestion, assuming that trypsin is the agent responsible for this process. A lesser dosage would not in our opinion constitute a valid trial of the antitryptic properties of the drug.

It would be interesting to learn whether this dosage was adhered to by Skyring and his colleagues. Unfortunately the information given in their publication does not permit a conclusion to be reached on this point, though data from three subjects in whom the total dose administered and the duration of treatment are presented would suggest that the dosage ranged between 30,000 to 75,000 units per day. It would be a pity to condemn the principle of using antitryptic agents in acute pancreatitis if the dosage used is inadequate. Clearly there is a need for a thoroughly scientific appraisal of this drug in the ward and in the laboratory. Such studies are at present being conducted in this centre.

We would like to thank Farbenfabriken Bayer A.G., Leverkusen, Germany, for a generous gift of Trasylol.

—We are, etc.,

Western Infirmary, Glasgow W.1.

D. M. GOLDBERG.
A. D. ROY.

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Diverticulum of the Female Urethra

SIR,—I read with interest the article on diverticulum of the female urethra by Mr. J. H. N. Ferris (25 September, p. 738). I recently treated a somewhat similar case which was complicated by the presence of three small calculi in the diverticulum.

A woman of 33 was admitted under my care in June 1965 complaining of very vague dysuria associated with intermittent retention of urine. After considerable investigations it was found that she had a diverticulum just proximal to the external opening of her urethra, which contained three small stones. The stones were easily removed through a small incision and it was possible to pass a probe into the urethra just within the external meatus. The diverticulum was excised.

Her post-operative progress was very satisfactory and there has been no recurrence of her retention or dysuria.

—I am, etc.,

Farnham Hospital, Farnham, Surrey.

S. C. RAW.

Pain after Haemorrhoidectomy

SIR,—I have read your leader on "Pain after Haemorrhoidectomy" (18 September, p. 659) with interest. I agree that the number of post-operative doses of Omnopon (papaveretum) administered is not an accurate guide to the degree of post-operative pain. Many night sisters administer Omnopon to cases operated upon during the day because of restlessness rather than pain. A good indication of the degree of pain is whether the patient is able to sit on his "end" after operation. I have long suspected that a certain amount of the post-operative pain from haemorrhoidectomy is induced by the dressing which may be applied.

For the last year I have abandoned post-operative dressings after the Milligan-Morgan operation. After ligation of the main pedicles bleeding is arrested by the use of the diathermy. The raw areas are then insufflated with penicillin–sulphonamide powder and sprayed with Nobecutane. The plastic film is allowed to dry thoroughly before the patient is taken down from the lithotomy position. The pain when bowel action starts is, of course, as bad as with any other form of dressing.

Many of these patients can sit up in bed on the first post-operative day, and almost all on the second day. By this time also they are up for toilet, which is an advantage. Healing time is not prolonged, and so far there have been no complications in the forty-odd cases so treated.—I am, etc.,

Military Hospital, Colchester, Essex.

A. V. FORAGE.

Arthritis and Ulcerative Colitis

SIR,—In their two articles Drs. V. Wright and G. Watkinson (18 September, pp. 670 and 675) convincingly demonstrate an increased incidence of, firstly, peripheral arthritis, and, secondly, of sacroiliitis in patients with ulcerative colitis—there being an association between the two particularly strong in females. Only four of their 42 patients with *x*-ray evidence of moderate/severe sacroiliitis had evidence of ligamentous calcification (these had a sex ratio of 3:1—similar to that found in classical ankylosing spondylitis (A.S.)), and yet except for the last paragraph the presence of sacroiliitis is persistently equated with A.S.

X-ray evidence of sacroiliitis has been found in ulcerative colitis with no symptoms of arthritis, Crohn's disease, psoriasis, Still's disease, Reiter's syndrome, brucellosis, familial Mediterranean fever, and Whipple's disease, as well as in A.S.,[1-4] and yet the authors have previously been content to quote an incidence of A.S. based on the presence of sacroiliitis alone—no other information being given. This clearly is not enough, and I would suggest a distinction should be made between sacroiliitis—by itself or with a peripheral arthritis—as may be found in association with the above diseases, and sacroiliitis associated with progressive ligamentous ossification, as found in A.S.

It may be that there is indeed an increased incidence of A.S. in these patients, but this is in addition to "colitic arthritis," associated with sacroiliitis more commonly in females, for judging by the follow-up evidence quoted the prognosis of this sacroiliitis is very different to that of A.S.

The figure quoted for the incidence of moderate/severe sacroiliitis in controls—viz., 5%—seems to me surprisingly high, and it would at the present time surely be wrong to consider these people as having ankylosing spondylitis.—I am, etc.,

A. SCIENCE RUSSELL.

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Thumb-sucking and the Teeth

SIR,—Whilst I expected there might be some criticism of my letter on thumb-sucking (14 August, p. 422) I am afraid I remain unrepentant. For several years all children passing through my practice have been carefully examined and asked to demonstrate any sucking habits they had, or used to have, and the parents questioned as to the extent and duration of the habit. From this study I have found an almost 100% correlation between the various forms of sucking and distinct and recognizable facies; though I hasten to add that there are several types of sucking, including several ways of thumb-sucking, which cause no observable deformity, but these are fairly rare. Broadly it can be said that any sucking habit which exerts leverage on the skeleton will cause skeletal deformity. Contrary to Dr. J. Apley's assertion (4 September, p. 589) that sucking may cause irregularity of the teeth, but not the jaws, my observations show it always causes deformity of the jaws even if it leaves the teeth reasonably regular, as it may do. In addition, with the commonest type of suck, the nose is also distorted, as the knuckle of the index finger is rammed up under the nostrils, causing the tip of the nose to turn up sharply. This is made even worse where the index finger is rested on the bridge, depressing it, and the knuckle of the second

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