dren over 7 who have life-long nocturnal enuresis, without symptoms of emotional disturbance. We encountered the following snags even then:

1. The child slept so heavily that the buzzer failed to wake him.
2. The child woke and lay screaming, apparently too frightened to move or turn off the bell, or became too frightened to use the bell after one or two tries.
3. The child was difficult about using the bell, disconnecting it before going to sleep or sabotaging it in some other way.
4. The parents were insufficiently interested to maintain the child's enthusiasm, and to ensure that he was using the bell properly and waking fully.

In most cases (1) was overcome by a long-acting amphetamine derivative given for a short period only: large doses may be needed, the margin was narrow between sleeplessness and no effect. (2) was sometimes overcome by a mild tranquillizer such as meprobamate 200-400 mg. In most cases (2) indicates an anxiety state which should be treated first. Fear of the dark may be one of the causes of nocturnal enuresis. (3) indicates treatment is needed for underlying emotional or personality disorder. Often we found (4) impossible to overcome. Parents of this kind have pretended the child was cured, and may be included in surveys as successes. Others have produced all kinds of arguments against the bell, apparently with the motive of avoiding the trouble entailed by its use and by having to visit the clinic. We have found the bell particularly unsuccessful in children from broken homes, in foster homes, and in children's homes unless the parent surrogate was unusually enthusiastic.

In onset enuresis, and in enuresis associated with other symptoms, we have not found the buzzer so effective; the following principles have guided our selection of treatment. If the precipitating cause is still present this should be tackled; we found anxiety to be the commonest, often relating to school, to a traumatic change of domicile, or to birth of a sibling. Anxious children did very well in group psychotherapy, supplemented in the early stages with meprobamate. Children who were enuretic day and night seldom responded to the buzzer. Frequency and unusually small bladder capacity (1½-2 oz. (42-57 ml.)) was often found, and had to be dealt with.

Symptoms of emotional disturbance did not necessarily contraindicate the buzzer. We encountered a group of dulled depressed enuretics, retarded at school and inhibited in their relationships, whose good response to the bell was accompanied by their becoming cheerful and confident.

No satisfactory explanations have emerged from the literature of why all children are not nocturnally enuretic, nor of why the buzzer cures some of those who are. Conditioning has been suggested, yet this does not account for the following observations:

- (a) Nocturnal enuresis is frequently associated with very heavy sleep.
- (b) Patients improving with the buzzer usually begin to sleep right through the night without waking to micturate, and their sleep becomes lighter. One could speculate on the role of the sleep-maintaining mechanism

of the reticular activating system. Is the habit of voiding urine and sleeping more deeply acquired in some cases to avoid the unpleasant breaking of sleep, or waking in the frightening dark, or in others to avoid the disturbing pain of stretching the bladder?

A final plea: could not some administrative measure be devised so that the buzzer can be prescribed by general practitioners and consultants? At the moment we seem dependent on the generosity of our colleagues in health departments.—I am, etc.,

C. J. WARDLE.

School and Family Psychiatric Service,
Lincoln.

Serotonin and Gut Motility

SIR.—My attention has just been drawn to Dr. D. J. Fishlock and Mr. A. G. Parks's observations (September 14, p. 666) on the response of human colon and ileum to serotonin, which I have read with great interest. We in Kampala have been considering the possibility that the frequency of adult intussusception and volvulus indicates a general increase of gut motility in the local population associated with the high level of 5-hydroxytryptamine in the banana, which forms their staple diet.

Early this year I carried out the following procedure during laparotomy for resection of the sigmoid colon in three patients with recurrent volvulus. After isolation of the redundant loop and ligation of its blood supply, ½ ml. of a solution containing 10 µg./ml. of 5-hydroxytryptamine was either injected into an artery adjacent to the colon or applied direct to the surface. In no case could any local increase of activity be elicited. On the other hand, the same procedure applied to an ileal loop in another patient produced profound and prolonged contraction.

These observations, and those of your contributors, tend to strengthen the hypothesis that a banana diet (1 kg. per day is quite common) may lead to abnormal small-bowel activity resulting occasionally in adult "idiopathic" intussusception or to "double" volvulus, in which we believe a hyperactive loop of small bowel ties itself in a knot around the sigmoid colon.

In contrast, it seems that the mechanism of sigmoid volvulus must be quite different, and a study of these two common types of volvulus seen in this area shows a different pattern of sex, tribe, and behaviour.—I am, etc.,

J. J. SHEPHERD.

Department of Surgery,
Medical School,
Makerere University College,
Kampala, Uganda.

Emergency Suprapubic Catheterization

SIR.—I have read with interest the communication from Mr. J. McKenzie Buchanan (October 19, p. 1000), and may say that I have practised the method

described on several occasions where difficulty was experienced in per urethram relief due to obstruction in the prostatic urethra.

A method similar to that described by Mr. McKenzie Buchanan but using the MacGregor introducing needle will be found most useful and in my opinion an improvement on the procedure described. In the method the 2½-in. (6.3-cm.), 9-gauge introducer needle is fitted with the number 8 F.C.G. (French catheter gauge) nylon catheter, and, using a syringe with a Luer fitting mount as a handle, the needle and catheter are introduced into the distended bladder. The nylon catheter is pushed into the bladder, being guided along the needle-introducing track until 4 in. to 5 in. (10 to 13 cm.) lie within the distended organ. The introducing needle is then withdrawn leaving the catheter *in situ*.

It is conceivable that the manufacturers (Messrs. Chas. F. Thackray Limited, Old Medical School, Park Street, Leeds 1) could produce a heavier gauge introducer than 9 gauge, and that a wider bore catheter could then be used in the procedure. I may say, however, that in use I have found the available gauge 9 to be sufficient for the purpose.—I am, etc.,

Vom,
Northern Nigeria. LOUIS N. GLEESON.

Spontaneous Regression of Cancer

SIR.—With reference to the above subject it has been our lot to come across the following case since your annotation (September 21, p. 700).

The patient was a woman and was first seen in St. Giles's Hospital, Camberwell, in 1947 at the age of 58 years, when a subtotal gastrectomy was performed. Mr. G. Matheson kindly supplied the following notes:

"At operation the growth was found to be infiltrating the transverse mesocolon involving the middle colic entry. It was considered at operation that the patient would not stand both gastrectomy and colectomy, so a high partial gastrectomy with intercolic gastro-jejunostomy was carried out—section of stomach showed a diffuse infiltrating carcinoma (see Fig.). A further laparotomy was carried out on December 2,