Previously an uninterrupted recovery could confidently have been expected in this type of poisoning once the patient had regained consciousness. This case would suggest that relapse and sudden death may occur in poisoning by tricyclic antidepressant compounds after apparent recovery. The forced diuresis may have kept the patient alive initially and there could be an argument for continuing this treatment in order to wash out the possible second wave of metabolites, which would otherwise contribute to an unexpected relapse.

I should like to thank H.M. Coroner and Dr. A. A. Miller for permission to describe the post-mortem findings, and Dr. C. Maxwell, of Geigy Pharmaceutical Limited, for helpful advice.

—I am, etc.,

Whittingham Hospital,
Preston, Lancs.

A. B. MASTERS.

Oculogyric Crises after Phenothiazines

SIR,—In view of the reports of bizarre neurological disturbances following treatment with perphenazine (Fentazin) from Drs. D. A. Heath and J. M. McGarry (11 February, p. 363) and Dr. J. R. Harries (22 July, p. 241) we should like to summarize briefly our experience with eight similar cases which have been seen in the last year. The patients have mainly been young adults, their ages ranging from 14 to 50 years with an average of 23 years. In four cases reactions have followed a single 5-mg. intramuscular injection given as premedication or postoperatively for vomiting. Symptoms have begun abruptly from 18 to 36 hours after the onset of treatment, and in none of our patients has this type of reaction been seen as a complication of long-term therapy.

Spasms of the head and neck occurred, most commonly with twitching, neck retraction, risus sardonicus, and oculogyric crises. These spasms were associated with curious subjective feelings of stiffness and immobility of the tongue with difficulties in chewing and swallowing, which occasionally preceded the more dramatic spasms by a few hours. Opisthotonos, flexion, and extension spasms of the limbs with a *main d'accoucheur* deformity were seen in the more severely affected. All patients remained completely alert mentally but were unable to modify their movements in any way. The attacks subsided spontaneously or in a few hours, with or without mild sedation. We have not used benzotropine (Cogentin), which Ayd¹ has found to give rapid relief.

We feel that, although these neurological complications are not uncommon, they are as yet poorly recognized, and our cases have presented with a wide range of provisional diagnoses, including tetanus, tetany, epilepsy, and hysteria. Our experience confirms the finding of Kinross-Wright² that young people are unduly susceptible to these dystonic and dyskinetic reactions and we would advise caution in the use of this drug parenterally in this age group.—We are, etc.,

E. C. B. KEAT.

Royal Sussex County Hospital,
Brighton, Sussex.

P. J. TOGHILL.

King's College Hospital,
London S.E.5.

REFERENCES

- 1 Ayd, F. J., jun., *J. Amer. med. Ass.*, 1961, **175**, 1054.
- 2 Kinross-Wright, V. J., *S. Afr. med. J.*, 1957, **31**, 1167.

Case of Diarrhoea and Goitre

SIR,—I was fascinated by the report in the Clinicopathological Conference of the above case (29 July, p. 293), but, as a surgeon, I would like to have seen some remark to the effect that the patient had been offered an operation to remove the thyroid nodule discovered in 1960.

I have recently seen a young woman with a small lump in the neck which I thought might be a carotid body tumour. Three years before she was told by two practitioners in England that the lump was nothing to worry about. I referred her to South Africa, where the lump was found to be a metastasis from a thyroid carcinoma. At subsequent hemithyroidectomy and block dissection involved nodes were found to extend into the superior mediastinum.

We are used to rural Africans refusing operations until their tumours become inoperable, but it is alarming to find doctors not pressing for the histological diagnosis of "innocent" lumps which their patients bring to their notice.—I am, etc.,

Princess Marina Hospital,
Gaborone,
Botswana, Africa.

IAN KENNEDY.

Mercury Perchloride in Surgery

SIR,—In a letter (9 September, p. 679) Mr. H. B. Devlin discussed the use of 1:500 mercuric perchloride solution in large-bowel surgery. He concluded that it was a safe anticancer agent when used as described by Goligher *et al.*¹ There have been no reported cases of mercury poisoning following the use of this solution in this manner. Keynes² has suggested that the solution may be too toxic to leave in the peritoneal cavity to prevent intraperitoneal seedlings of tumour, although he used a 1:500 solution for this purpose on one occasion without ill effect. We wish to report the following case to emphasize that mercuric perchloride is too dangerous to use in the peritoneal cavity.

A woman of 68 years with no pre-existing evidence of renal disease underwent an ovarian cystectomy on 2 May 1967 for what was subsequently shown to be a mucous cystadenoma. During the course of the operation, which was otherwise uneventful, the peritoneal cavity was irrigated with 250 ml. of a 1:500 solution of mercuric perchloride. It was not known whether the peritoneal cavity was mopped dry prior to closure. Immediately postoperatively the patient became severely oliguric, and was transferred to the Hammersmith Hospital on 8 May for treatment of an acute renal failure. On admission peritoneal dialysis was commenced, but, as this was unsatisfactory, a Scribner A-V fistula was inserted into the right forearm to facilitate haemodialysis with a Kolff twin-coil artificial kidney machine.

Ureteric obstruction was excluded by cystoscopy and bilateral retrograde pyelography. Intermittent haemodialysis was necessary on 19 occasions during the next two and a half months. After the first month her urine output gradually increased, and since her discharge on a 20-g. protein diet with moderate fluid restriction the blood urea has remained at 90 mg./100 ml. Her daily urine volume is approximately 800 ml., containing 6.5 g. of urea. On this regimen she is now leading an active life at home.

A specimen of urine taken one month after exposure to mercuric perchloride revealed a mercury content of 150 µg./litre. This figure is much lower than that sometimes observed in chronic mercurial poisoning, but it is

known that there is no correlation between the urine mercury level and the degree of renal damage sustained. Indeed, the urine mercury concentration falls with the onset of renal tubular damage.

In view of our experience with this case, we advise that mercuric perchloride should not be used as an irrigating agent in the peritoneal cavity.

We are grateful to Mr. H. T. Delves, A.R.I.C., Institute of Child Health, London, for performing the urine assay for mercury.

—We are, etc.,

J. C. GINGELL.
JOHN CLEGG.
M. WALLACE.

Hammersmith Hospital and
Royal Postgraduate Medical School,
London W.12.

REFERENCES

- 1 Goligher, J. C., Dukes, C. B., and Bussey, H. J. R., *Brit. J. Surg.*, 1951, **39**, 199.
- 2 Keynes, W. M., *Ann. Surg.*, 1961, **153**, 357.

Diagnostic Paracentesis

SIR,—I have been glad to note the growing interest in diagnostic abdominal paracentesis as evidenced by the articles of Morris¹ and Baker *et al.*² I now use it routinely in all abdominal diagnostic problems, including the patient with ascites of uncertain aetiology.³ A film, cell count, and protein estimation are all simple procedures for a small laboratory and allow treatment or prognosis on a sure basis.

I am surprised that only "80% positive paracentesis can be expected in intraperitoneal haemorrhage." I have found that a No. 1 needle on a 10-ml. or 20-ml. glass syringe, usually only into either lower quadrant, is quite adequate if the patient has been made to lie on the appropriate side, either before or after insertion of the needle. The needle is withdrawn slowly, the plunger under tension. It is often only as it seems the tap has been negative one obtained a small amount of fluid coming from a thin film on the peritoneum.

A negative paracentesis thus performed is now accepted as a contraindication to surgery for suspected ectopic pregnancy, especially when there is an associated sudden fall in Hb level. Two recent cases in this hospital were explored in spite of negative taps. They were found to be normal intrauterine pregnancies but associated with acute haemolytic crisis.—I am, etc.,

Wesley Guild Hospital,
Ilesha, Nigeria.

REFERENCES

- 1 Morris, P. J., *Brit. J. Surg.*, 1966, **53**, 707.
- 2 Baker, W. N. W., Mackie, D. B., and Newcombe, J. F., *Brit. med. J.*, 1967, **3**, 146.
- 3 Nwokolo, C., *ibid.*, 1967, **1**, 33.

Headlight Glare

SIR,—Dazzling headlight glare we know is the cause of some of our road accidents at night. Dipped headlights are not 100% effective even if properly adjusted. The following solution is therefore offered for your consideration and comment.

Let us suppose that it was made compulsory to polarize headlights at 45° from the vertical, then if windscreens or sun visors or goggles or glasses were similarly polarized to 45° in the same plane one would not interfere with one's own headlight field, but light from