needle was used and the dorsum of the hand always chosen as the site of injection. With a little care this can be a relatively easy technique. The results were much improved.

The local anaesthetic used was prilocaïne (Citanest) 0.5% without adrenaline, the average dose being 30 ml. (150 mg.), decreasing to 20 ml. (100 mg.) in thin and frail limbs and increasing to 40 ml. (200 mg.) in fat and more muscular limbs. In one case a total of 60 ml. (300 mg.) had to be injected as the tourniquet accidentally deflated 1½ minutes after the first 40 ml. had been injected. There were no systemic effects seen in any case. The time of inflation of the tourniquet ranged from 10 minutes to 1 hour 45 minutes.—I am, etc.,

CHARLES E. HOPE.

Department of Anaesthetics,
The Royal Infirmary,
Edinburgh.

REFERENCE

- ¹ Holmes, C. McK., *Lancet*, 1963, 1, 245.

Bullous Lesions in Acute Barbiturate Intoxication

SIR,—I am surprised on reading the interesting publication by Dr. G. W. Beveridge and Dr. A. A. H. Lawson (27 March, p. 835) that the occurrence of bullous lesions in acute barbiturate intoxication has received little recognition.

Thirty years ago, as casualty-officer at the Royal Sussex County Hospital, I saw many cases of acute barbiturate intoxication with bullous lesions—of the type and distribution they describe. Indeed these bullae were so frequently observed that they were accepted as a useful diagnostic finding in patients brought to us in coma of uncertain origin.

It may also be of some interest to mention that in those days the most effective treatment for deep barbiturate coma was insertion of a lumbar-puncture needle and allowing drip-by-drip drainage of barbiturate-loaded cerebrospinal fluid over a period of 24 to 48 hours. Sometimes as much as 20–30 oz. (600–900 ml.) of C.S.F. was collected, and the patient thereby regained consciousness. It was a crude procedure by present-day standards, but it worked—and the patient was surprised, though not always pleased, to find that he was still alive.—I am, etc.,

Newtownards,
County Down.

GORDON WARNOCK.

Side-effect of Amitriptyline

SIR,—I wish to report a side-effect of the antidepressive drug amitriptyline (Tryptizol) which, so far as I am aware, has not been previously reported.

The patient, a man of 35, was first given this drug by me in hospital in 1963 when he developed a hesitancy and stammer in his speech. The drug was stopped, and within a few days his speech returned to normal.

Recently the patient was referred to me again because of a recurrence of his depression. His doctor had prescribed amitriptyline 25 mg. q.d.s., and within four days the patient developed a marked speech disturbance. This took the form of a severe stammer with incoordination of tongue and lip movements. Words were produced in an explosive manner. There was also some

incoordination of arms and legs with occasional sudden myoclonic spasms. He might suddenly drop a plate, and his legs felt "out of control." The speech disturbance was quite severe and the patient had some difficulty in making himself understood. There was no previous history of stammer, except when he had had amitriptyline two years previously.

The drug was withdrawn and the patient given a phenothiazine (Fentazin 2 mg. t.d.s.). The symptoms recovered completely after five days.—I am, etc.,

London W.1.

S. BOCKNER.

Thrombosis in Women of Child-bearing Age

SIR,—Dr. D. A. Cahal, writing on behalf of the Committee on Safety of Drugs (10 April, p. 993), wishes to establish the relative frequencies of thrombotic incidents in women of child-bearing age who are, and who are not, taking oral contraceptives.

The last sentence of his letter is so worded that doctors are asked to report only incidents in which an adverse reaction to a drug is suspected. Is this the only information that is required, because if this intention is followed there will be no control series (not taking the drug) for comparison?—We are, etc.,

L. M. McEWEN.

H. C. STEWART.

Department of Pharmacology,
St. Mary's Hospital,
London W.2.

Haemorrhage after Pneumonectomy

SIR,—In their article on carcinoma of the bronchus Mr. J. R. Belcher and Dr. R. Anderson (10 April, p. 948) state that the number of operative deaths due to haemorrhage was high, "and this should be avoidable."

They show 11 cases dying of haemorrhage in a total mortality number of 66. In my experience this complication is due to a ligature slipping off the pulmonary artery. I lost three cases due to this reason during 1962 and 1963. At that time I used the technique of ligature, plus transfixion and ligature, as a method to secure the pulmonary artery.

I therefore changed my technique to cross-clamping the pulmonary artery and suture closure of the open arterial end. Since then there have been no deaths due to haemorrhage. This suture method does make death from haemorrhage avoidable after pneumonectomy.—I am, etc.,

The Royal Infirmary,
Sheffield.

A. G. NORMAN.

Hypertension and Toxaemia

SIR,—In your leading article (20 March, p. 738) dealing with hypertension as a sequel to pre-eclampsia you draw attention to Epstein's findings to support this contention. Bechgard¹ had arrived earlier at a similar conclusion in a follow-up of 320 patients 10 years after delivery, of whom 27 showed significant hypertension. Repeating this study in 93 (roughly 30%) of these same patients 15 years later he found that the mortality

amongst these was twice as high as in those women who suffered from essential hypertension only; though, presumably, essential hypertensives developing severe hypertension early in pregnancy suffered the highest mortality of all. Possibly, however, mortality figures do not provide a true index for comparison.

On the other hand, Tillman² in studying 218 normal pregnancies and 137 abnormals (hypertension or pre-eclampsia complicating) found no difference between the blood-pressure of the two groups four years post partum. These opposite findings, in addition to those in your leader, further confuse the conclusion.

One other point needs consideration. In a previous letter³ to you I had indicated that sympathetic intrusion may play a part in the aetiology and throw light on the sequel of pre-eclampsia. Raab⁴ has detected an excessive responsiveness of patients to adrenaline and noradrenaline in their first pregnancy prior to their developing pre-eclampsia. Such a sensitivity could play a part in the hypertension of the syndrome if continued beyond pregnancy.

It would appear that amongst the 48 patients investigated by Epstein⁵ only half were primiparae. Since pre-eclampsia clinically is characterized by its infinitely greater incidence in primiparae the corrected primiparous figure for comparison should be 24 cases. Then again, recognizing the peculiar association quite possibly as an aetiological factor of hypertension, we find that once again half of the patients were overweight—still further correcting the number to 12 in whom the aetiological hypertensive factor could be excluded. This number is far too small for a statistical conclusion, bearing in mind that there were not a few who had developed hypertension without preceding toxæmia in the controls. If Epstein⁵ is right in his deductions that over a third of pre-eclamptic patients develop late hypertension, and if we assume that 10–15% of all primiparae evidence toxæmia, then the incidence of chronic hypertension in the married female population would be so excessive that it could not possibly escape actuarial notice that would separate them as a risk from the unmarried female and demand a loading of size in their life-insurance premiums.—I am, etc.,

Worthing, Sussex.

JOHN SOPHIAN.

REFERENCES

- ¹ Bechgard, P., Andreassen, G., and Hertel, F. In *Symposium on Non Toxaemic Hypertension in Pregnancy*, edited by N. F. Morris and J. C. Browne, p. 192, 1958. Churchill, London.
- ² Tillman, A. J. B., *N.Y. St. J. Med.*, 1956, 56, 374.
- ³ Sophian, J., *Brit. med. J.*, 1964, 2, 1661.
- ⁴ Raab, W., Humphreys, R. J., and Lepeschkin, E., *J. clin. Invest.*, 1950, 29, 1397.
- ⁵ Epstein, F. H., *New Engl. J. Med.*, 1964, 271, 391.

Infantile Umbilical Hernia

SIR,—The *B.M.J.* for 20 February has just arrived here, and I would like to report a case of rupture of an infantile umbilical hernia similar to that described on p. 498. Umbilical hernia is a common finding in Ibo children, and treatment is almost always refused, as most parents think it makes the baby more beautiful to have an umbilical hernia.

Sebastian was admitted on 30 June 1962, aged about 6 weeks. He had an umbilical hernia