

injected to pregnant rats. No cardiovascular abnormalities were produced, but anophthalmia occurred in some of the test foetuses. In addition abnormalities of the central nervous system were produced. The net incidence of malformations in this series was similar to that occurring in my own.

In view of the work of Robson and his co-workers,³ who have demonstrated abnormalities in the rodent placenta following the administration of 5H.T., it is tempting to suggest the possibility that microphthalmia and other abnormalities in the derivatives of the neural ectoderm in these animals could be related to anoxia. This possibility is supported by the findings of Brent and Franklin,⁴ who clamped the uterine vessels for up to three hours on the ninth day of gestation of the rat. On the twenty-first day the abnormalities observed were microphthalmia, renal aplasia and agenesis, anencephaly, and hydrocephalus.—I am, etc.,

MARY J. SELLER.

Paediatric Research Unit,
Guy's Hospital,
London S.E.1.

REFERENCES

- ¹ *Brit. med. J.*, 1963, 2, 1546.
- ² Reddy, D. V., Adams, F. H., and Baird, C., *J. Pediatr.*, 1963, 63, 394.
- ³ Poulson, E., Robson, J. M., and Sullivan, F. M., *Science*, 1963, 141, 717.
- ⁴ Brent, R. L., and Franklin, J. B., *ibid.*, 1960, 132, 89.

Addiction to Chlorodyne

SIR,—Cases of addiction to chlorodyne similar to the ones described recently in your columns (9 November, p. 1177; 30 November, p. 1411; 23 November, p. 1284) have been observed by us from time to time over the past few years. They occurred chiefly in neurotic and unstable men and women who often also took alcohol and other drugs to excess, such as barbiturates and amphetamines. Usually the patients had started taking the mixture for symptoms such as diarrhoea or headache, gradually increasing the dose over weeks or months to several ounces per day. On admission they usually presented with emaciation, confusion, depression, paranoid delusions, and hallucinations. They improved in hospital, but in most cases relapsed rapidly after discharge, and usually there had been several admissions to various hospitals.

Whilst chlorodyne addiction may not be widespread milder forms may yet not be too uncommon among the psychologically unstable. Thus quite a few cases were seen in the past at Spelthorne St. Mary's,¹ a home catering for female alcoholics and addicts, and four cases have been observed at St. Bernard's Hospital over the past six months.

More rarely we have come across other examples of drugs where a combination of the ready availability without prescription with the consumption of large quantities has led to a state of addiction and chronic intoxication. They include: (1) Poppy-heads (capsules of *Papaver somniferum*).² (2) "Paregoric" (tinc. opii camph.), a cough mixture which a middle-aged woman had been taking for about eight years, in recent years up to a dose of 6 oz. (170 ml.) per day (containing more than 1½ gr. (97 mg.) of morphine); the recommended single dose of this mixture is ½–¾ fl. oz. (2–4 ml.). She has been getting in a state where she is lacking energy, cannot be bothered, eats little (she

lost a stone in the past two months), and so on. If she tries to leave off the tincture she gets even more depressed than usual, more lethargic, tending to yawn, etc. (3) A recently introduced travel-sickness remedy, containing in each tablet hyoscine hydrobromide, 0.15 mg., and caffeine, 25 mg.; the girl in question is reported to have taken up to 40 to 50 tablets per day—namely, approximately 7 mg. of hyoscine—and to have become very thirsty, very restless, excitable, and very talkative, etc.—I am, etc.,

M. M. GLATT.

St. Bernard's Hospital,
Southall, Middlesex.

REFERENCES

- ¹ Sister Patricia, personal communication.
- ² Glatt, M. M., and Hossain, M. M., *Brit. med. J.*, 1962, 2, 102.

Pronethalol and Cardiac Arrhythmias

SIR,—The article by Drs. J. P. P. Stock and N. Dale (16 November, p. 1230) recording their experiences with pronethalol shows that this drug is of value in the treatment of certain types of cardiac arrhythmia. It is of interest to note that guanethidine, which also produces sympathetic blockade, has been successfully used by Jackson in the treatment of two cases of paroxysmal atrial tachycardia.

In the first patient attacks were almost completely abolished during two months' therapy with guanethidine, but the production of hypotensive symptoms made the continuance of the drug undesirable. Accordingly, right thoracic sympathectomy was performed, and following this operation there were no attacks of paroxysmal atrial tachycardia. In the second patient a dose of 25 mg. of guanethidine taken at bedtime resulted in almost complete freedom from attacks, and did not cause symptoms of hypotension. It was suggested that the common mechanism of action of right thoracic sympathectomy and guanethidine therapy was a decrease in myocardial sympathomimetic amines.—I am, etc.,

Kampala, Uganda.

R. M. SYKES.

REFERENCE

- ¹ Jackson, G. L., *New Engl. J. Med.*, 1963, 269, 518.

Sodium Fluoride and Cell Growth

SIR,—As you probably know, the letter from Dr. R. J. Berry and Mr. W. Trillwood (26 October 1963, p. 1064) detailing their experiments with sodium fluoride at Oxford was being used within a week to rob Australian children of the benefits of fluoridation. Here, in the *Sussex Express*, a correspondent wrote: "You may have seen published recently the findings of an expert committee on cancer research at Oxford. It gives an added seriousness to the thought required for fluoridation." The editor refused to publish a refutation of this sedulously fabricated myth. It would all be amusing if it were not for the fact that the people who are going to pay for this folly are small children, and they are going to pay all their lives. Every scientifically reputable body, as far as I know, is in favour of adjusting the fluoride content of public drinking-water to 1 part in a million if the native fluoride is below that level. I suggest that the time has now

come when the B.M.A. and the B.D.A. and other responsible bodies should urge Parliament, this session, to order general fluoridation in the same way that calcium was put back into white bread in 1953.—I am, etc.,

Rye, Sussex.

C. G. LEAROYD.

** See leading article at page 258.—ED., *B.M.J.*

Old People in the Cold

SIR,—From infancy to old age there is a slowing of our metabolism, and after fifty years the judicious application of an electric blanket, on colder nights, helps maintain comfort in the limbs. At greater age there is positive need to combat this increasing hypothermia.^{1,2}

For some years I have successfully persuaded friends and relatives of the older patients in my practice to provide them with an electric blanket. I order the blanket, to ensure it has sufficient safety factors and is easy to regulate by the patient in bed. The "cover" type has advantages.

I think this simple measure saves patients from the grave risks of hypothermia, myself from anxiety, and hospitals from some emergencies. I am not yet suggesting electric blankets should be prescribed on E.C.10.—I am, etc.,

Blairstown, Perthshire. M. M. SHEPHERD.

REFERENCES

- ¹ Taylor, G., *Brit. med. J.*, 1963, 2, 1526.
- ² Crockett, G. S., *ibid.*, 1964, 1, 61.

SIR,—It is surprising that the use of penicillin to prevent secondary infection in accidental hypothermia continues in vogue (4 January, p. 19), since it is well recognized that penicillin antibacterial activity is much reduced at temperatures commonly obtaining in these patients. This has been repeatedly confirmed in experiments *in vitro*^{1,2} and also *in vivo*.³ It seems likely that tetracycline hydrochloride would be more effective in combating infection when the body temperature is reduced.—I am, etc.,

J. HAROLD JONES.

Department of Pathology,
Queen's University of Belfast.

REFERENCES

- ¹ Bigger, J. W., *Irish J. med. Sci.*, 1944, 585.
- ² Garrod, L. P., *Brit. med. J.*, 1945, 1, 107.
- ³ Jones, J. H., and Campbell, P. J., *J. Path. Bact.*, 1962, 84, 433.

Streptococcal Gangrene

SIR,—Your leader on streptococcal gangrene (11 January, p. 74) describes a rare but serious condition. I would like to draw attention to another somewhat rare lesion known as post-operative or synergistic gangrene and caused by an anaerobic streptococcus. Streptococcal gangrene, described by Meleney as acute haemolytic streptococcal gangrene,¹ may readily be confused with synergistic gangrene.

Thrombosis of vessels is not a factor in synergistic gangrene. The organism can only be cultured anaerobically, except perhaps in subculture. Brown *et al.* concluded that antibiotics were unreliable in synergistic gangrene.² A common feature of both types of gangrene is the localization of the affection to skin and subcutaneous fat. The treatment