Biochemistry of Schizophrenia

Sir,—Your leading article (18 February, p. 382) says that "only some schizophrenics improve with phenothiazine treatment." While this may well be true, it cannot yet be regarded as a fact sufficiently well proved to be used as a starting point for new theories on the biochemistry of schizophrenia.

Possible sources of error are: failure to prescribe adequate and sustained dosage, failure to check that prescribed phenothiazines were actually taken, mistakes in the diagnosis of schizophrenia, observation of cases complicated by leucotomy, and observation of cases complicated by senility or arteriosclerosis.—I am, etc.,

Wiglesley Hospital, Toronto, Canada.

D. P. Birkett.

Compulsive Desire for Pregnancy

Sir,—Your leading article on "Sexual Promiscuity Among Students" (25 March, p. 711) is some of the best medical evidence yet published to demonstrate the foolishness of the social reasons proposed for abortion. The neurotic and, on occasions, compulsive desire for pregnancy is so often suppressed temporarily in the social embarrassment of the pregnant state. On the advice of well-wishers or in a gesture of conformity abortion is requested. If this request is granted and permitted and the pregnancy is allowed to be born and the basic problem remain unsolved.—I am, etc.,

Welwyn Garden City.
E. H. J. Cotter.

Deaths from Asthma

Sir,—In 1966 Smith reported an increased death rate from asthma in England and Wales and this has been confirmed in the letter by Drs. R. A. Speizer, P. J. Heaf, and L. Strang (25 March, p. 756).

The figures shown below are from the Registrar General for Scotland. During the past three years there has been an increase in the number of deaths from asthma in Scotland and the decline in deaths from asthma noted in the fifties appears to have been reversed.

From Australia, McManus has reported three deaths from asthma which appeared to have been due to cardiac arrest following the administration of adrenaline to patients who had already received isoprenaline. Following this there have been several reports which suggest a link between the excessive use of sympathomimetic amines and death from asthma (Greenberg and the recent letters by D. J. Greenberg and A. Pines (4 March, p. 563) and Dr. W. Pickvance (25 March, p. 756). This suggestion has been challenged by heart failure and myocardial infarction.

The recently reported low arterial P02 tension found in some patients admitted to hospital with moderate or severe asthma has been confirmed in this unit. This observation, together with the changes in the electrocardiogram frequently found in these patients, suggests the myocardium is under strain. Some experimental work to support the idea would be welcome. Adrenochrome (563) has been reported by Professor Mary Locket.

Most of the sudden deaths in asthma occur out of hospital and the attention of the general practitioner must be directed to this problem. Meantime sympathomimetic amines should be avoided in the emergency situation as their use may be useful in the assessment of the results of therapy. It is possible that I.H.R. estimation may be of value in diagnosis of subclinical coronary disease.

I have studied the I.H.R. in 61 patients with ischaemic heart disease and in 21 patients with hypertension. The I.H.R. was estimated after intravenous injection of 10 mg. propranolol and 2.4 mg. atropine. Pulse rate, blood pressure, and electrocardiogram were recorded before the administration and five minutes after blockade. In 26 of the patients with ischaemic heart disease (that is, 43%) the I.H.R. was lower than the estimated normal. One patient with an I.H.R. of 60 had fatigable heart failure, and one patient with an I.H.R. of 56 had intractable angina. In six of the patients with hypertension (that is, 28%) the I.H.R. was lower than the estimated normal, and five of these six patients had evidence of hypertensive heart disease. The I.H.R. therefore appears to reflect myocardial function.

Of the 21 patients with hypertension, the I.H.R. was higher than the resting heart rate in 17 cases, and in no case was there a fall in the systemic blood pressure. Of the 61 patients with ischaemic heart disease the I.H.R. was higher than the resting heart rate in 50 cases, and in only three cases was the blood pressure lower after the intravenous propranolol and atropine. No significant side-effects were observed in any case. These findings support the conclusion of Drs. Stanford and Sloman that, if propranolol is indicated following myocardial infarction, it may be given with safety if combined with atropine sulphate.—I am, etc.,

Robert J. Kernohan.
Cardiovascular Unit, Belfast City Hospital, Belfast.

Reference