Undergraduate Curriculum

Str.—Dr. G. E. Crawford's letter (14 October, p. 116) indicates that some people may be under the misapprehension that a main objective of departments of general practice is to influence undergraduate students to become general practitioners.

The principal objective is to broaden an undergraduate's experience of medicine and to let him see at first hand clinical situations which cannot be presented to him in hospital. It is true that in gathering that experience the student may come to believe that general practice is an attractive career. Such a judgement would surely be fortuitous. Training for general practice per se is, as Dr. Crawford's letter states, a postgraduate subject.

I know of no department of general practice that is not concerned with research and for general practice.—I am, etc.,

HELEN S. BUTLER
Singleton Hospital, Swansea
2 Department of Health and Social Security, Recommended Intakes of Nutrients for the United Kingdom, Reports on Social Health and Medical Subjects No. 120. London, H.M.S.O., 1969.

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The Porn Industry

Str.—Congratulations on your leading article, "The Porn Industry" (30 September, p. 779). The kind of common sense (and sometimes the humour) that is expressed in your leading articles is something for which I envy British doctors.—I am, etc.,

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Heart Failure and Neonatal Hypocalcaemia

Str.—The interesting association of heart failure and neonatal hypocalcaemia described by Drs. O. Troughton and S. P. Singh (14 October, p. 76) raises some important points. Some of the earlier reports of oedema in association with neonatal tetany described its occurrence in the first few days of life. Many of the babies were very ill and diverse factors probably accounted for both the hypocalcaemia and the oedema.

In a recent study of hypocalcaemia tetany in bottle-fed babies occurring 5-11 days after birth 6 out of 18 babies had bilateral pitting oedema of the feet in the absence of other obvious causes. The hypocalcaemia was associated with dilutional hyponatraemia and there was probably an increase in total body water. It was suggested that the high sodium load of the cow's milk diet together with a transient functional immaturity of the kidneys were aetiological factors. Though Drs. Troughton and Singh do not state the type of milk their babies were receiving it is unlikely that the diet was of aetiological significance in the development of oedema, as this sign developed within 48 hours of birth in several of the babies.

Unless it is appreciated that oedema in association with hypocalcaemia is not uncommon there is the danger that heart failure will be over-diagnosed. Many of these babies will also have hypomagnesaemia. Under these circumstances I would question the safety of digoxin therapy. Though the role of potassium deficiency in producing digitalis toxicity has been appreciated for many years, comparatively little is known about the effects of magnesium deficiency on the tolerance to digitalis in man. It has been shown in animals that acute depletion of serum magnesium decreases the dose of acetylstrophanthidin needed to produce toxic arrhythmias, and chronic depletion of magnesium prolongs the duration of digitalis toxicity. Magnesium-deficient mice given H-digoxin by the intraperitoneal route have higher myocardial and plasma levels of H-digoxin after one hour than control mice.

Until now is known about digitalis therapy in the face of magnesium deficiency I would suggest that when the diagnosis of heart failure is open to doubt digoxin should be withheld and a short-acting diuretic be given in addition to calcium and magnesium supplements. In those babies who are obviously in heart failure parenteral magnesium sulphate should be given prior to digitalization.—I am, etc.,

MALCOLM L. CHISWICK
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1 Kehrler, E., Archiv für Gynäkologie, 1913, 99, 372.
2 Shannon, W. R., Archives of Paediatrics, 1929, 46, 549.

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Leucocytes in the Feces

Str.—I feel that your leading article on leucocytes in the feces (14 October, p. 62) should not pass without comment. Reference was made to the investigations of J. C. Harris and others, who administered intestinal pathogens (Salmonella typhi and Shigella species) to volunteers. From their article one finds that the volunteers were "informed adult inmates of the Maryland House of Correction." I expect that a journal of the B.M.J.'s reputation would discuss the ethics of this study as well as applaud the results.—I am, etc.,

ARTHUR RUSHTON
Aberdeen Royal Infirmary, Aberdeen
1 Harris, J. C., DuPont, H. L., and Hornick, R. B., Annals of Internal Medicine, 1972, 76, 697.

Multiple Factors in Leukaemogenesis

Str.—The work of I. J. Bross and N. Natarajan,1 quoted in your leading article (21 October, p. 128), raises some disturbing thoughts in the preventive medicine sector. Could it be that the leukaemogenic potential of the activated (vaccine) measles virus is in the same class as that of its rogue (wild) cousin? Is there any likelihood that early immunization against measles in close temporal association with x-irradiation would increase the risks of leukaemogenesis? Perhaps these are unworthy thoughts. Perhaps someone has already studied and dismissed these possibilities. If such is the case I would like to be reassured. Otherwise it may be desirable to withhold immunization against measles, for example, from children who received radiation antenatally and to be even more reluctant to x-ray children who have been immunized against measles in the recent past.—I am, etc.,

J. K. ANAND
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Gastric Acid Secretion in Chronic Renal Failure

Str.—I was interested to read the paper by Dr. P. S. Venkateswaran and others on gastric acid secretion in chronic renal failure (7 October, p. 22), and am grateful to them for pointing out the distinction in the paper of Fillastre et al.1 between volume of secretion and hydrogen ion concentration. However, some of the statements Dr. Venkateswaran and his colleagues make need clarification.

They say that there is an increased incidence of peptic ulceration in patients with chronic renal failure. Certainly the proportion seems to be high, but in order to say it is increased the incidence must be related either to a random sample of the population of equivalent age and sex distribution or to a similar group of patients with chronic severe illness but not renal disease. In addition, having stressed that gastric secretion is different in males and females, they do not say whether the control group and the failure group were matched for age and sex.

The third point is the interesting effect of dialysis. Again we may ask whether the