

as Halifax in the north and Rotherham in the south.

I do not think that my colleagues should accept his advice uncritically. I do not feel that I could recommend to hospital authorities in this area that they should accommodate and supervise large numbers of such patients in an area where skilled professional manpower is hard to come by. I believe that this problem should be tackled in co-operation with social services departments, as we are doing here. It is not always helpful to compare the work of psychiatric hospitals with hospitals for the mentally handicapped.—I am, etc.,

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Poststerilization Mittelschmerz

SIR,—Gynaecological illness after sterilization was well recorded by Mr. M. J. Muldoon (8 January, p. 84). Disorders of menstruation such as menorrhagia, metrorrhagia, menstrual disturbance, and dysmenorrhoea are commonest. We have recently had an unusual complication which we thought should be recorded.

A 26-year-old patient complained that for two years she had had left iliac fossa pain at the midcycle (for 1-3 days) and on the first day of menstruation (less than one day's duration). She had had a Pomeroy type tubal ligation in 1969. No gynaecological abnormality was found on examination. Menstruation was regular and the pain was alleviated when ovulation was suppressed by hormone therapy.

In the absence of a firm diagnosis a laparoscopy was performed, and it was found that the left ovary was trapped by flimsy adhesions to the site of tubal ligation. The adhesions were broken down with a probe so that the ovary was almost fully mobilized. No other procedure was performed and the patient has been free from both mittelschmerz and dysmenorrhoea since.—I am, etc.

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Chlorpromazine in Malignant Insulinoma

SIR,—Chlorpromazine induces hyperglycaemia in normal man¹ and in laboratory animals.²⁻⁵ This may be explained, at least in part, by the recent observation that chlorpromazine inhibited glucose-induced immunoreactive insulin release from isolated islets of Langerhans in vitro.⁶ These observations prompted us to use chlorpromazine to prevent hypoglycaemia in a patient with a malignant insulinoma.

A 47-year-old woman, previously in good health, had a hypoglycaemic attack with loss of consciousness in March 1971. Between March and October 1971 the number and severity of attacks increased, requiring her admission to another hospital where she was maintained under continuous infusion of 10% glucose (2-3 l./24 hr). On 17 October 1971 she was transferred to the University Hospital St. Pierre. Physical examination and laboratory tests were unremarkable except the liver was enlarged 3 cm below the costal margin. Stopping the 10% glucose infusion on 19 October was followed by a rapid fall in blood glucose from 32 to 4 mg/100 ml while plasma immunoreactive insulin remained at fairly high levels (80-130 μ U/ml). Selective coeliac angiography showed a poorly

vascularized area in the region of the pancreatic body and multiple areas of pooling in the liver. An exploratory laparotomy showed a 4 x 4 cm, hard tumour in the body and head of the pancreas and multiple metastases in the liver, the wall of the aorta, and the mesenteric vein were observed.

Diazoxide (100 mg 3 times daily) was given from 30 October to 4 November while continuing the infusion of 10% glucose. Though blood sugar increased diazoxide was withdrawn because of persistent nausea, vomiting, and abdominal cramps. On 20 November treatment with chlorpromazine (25 mg 3 times daily by mouth) was started. The dose was progressively increased to 100 mg 5 times daily between 24 November and 7 December. Glucose infusion was stopped from 22 November to 7 December. During the two weeks' period when the sole therapy was chlorpromazine the patient did extremely well, experiencing no hypoglycaemic episode. The blood sugar rose from an average of 40 mg/100 ml towards normal fasting values (80-100 mg/100 ml). During the same period fasting plasma immunoreactive insulin levels varied between 20 and 60 μ U/ml. These were lower than those observed before chlorpromazine therapy. No side effects were noted. From 7 to 20 December the patient received four intravenous injections of streptozotocin 3 g.

At her request, the patient was discharged home on 24 December. She was taking chlorpromazine 300 mg daily. She was asymptomatic until 15 January 1972, when diffuse headaches developed accompanied by increasing weakness, nausea, and haematemesis. She died 24 hours later.

The results of this short-term clinical study suggest that chlorpromazine may be useful in preventing hypoglycaemia in patients with a malignant islet cell tumour who cannot take diazoxide.

Our work was supported by the Fonds National de la Recherche Scientifique, Bruxelles, Belgium, and the Fonds National de la Recherche Scientifique, Berne, Switzerland.—We are, etc.,

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Insulin in Diabetic Coma

SIR,—My idle right hand has been provoked by the therapeutic conference "Diabetes Mellitus—Problems of Ketoacidosis" (12 August, p. 409). If I understood correctly it is suggested that four-fifths of the initial dose of insulin should be given in diabetic coma intramuscularly because if given intravenously it is rapidly removed from the blood stream and destroyed by the liver and kidneys. Is it not possible that the liver and kidneys remove insulin from the blood stream because their need is great and the insulin so removed

remains physiologically active? If the latter premise is correct then all of the initial dose of insulin should be given intravenously in order that it might reach these organs as quickly as possible.

I am surprised that Dr. J. M. Stowers has had to give blood so frequently in such patients as to merit cross-matching with every admission. I personally cannot remember a single case requiring blood.—I am, etc.,

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Wetting and Soiling

SIR,—I am indebted to the critics (29 July, p. 289, and 19 August, p. 473) of my article (15 July, p. 161) for so nicely demonstrating the very phenomenon I have often pointed out¹⁻³ to be the chief obstacle to progress in psychiatry. It is evident that diametrically opposite opinions can be held firmly—not to say passionately—by intelligent, experienced, and well-meaning clinicians even though there are no difficult intellectual issues involved and the basic data are not in dispute. On the one hand, I believe that my views are right (and that the considered arguments in my article—which indeed largely anticipated the specific objections raised—have been ignored), whereas my critics are equally sure I am wrong. But whichever side is right the resultant deadlock is an objectively observable fact, and so is the similar widespread failure to reach agreement on most of the important emotionally-charged issues in human relations. It is obviously time we gave up the vain hope of solving these age-old (as well as more recent) disputes by further endless polemics and started to tackle scientifically their underlying cause.

Workers in other branches of science would not think of using measuring or calculating apparatus that had not been subject to careful calibration, yet when we make important decisions affecting the treatment of emotionally disordered patients or try to assess the validity of psychiatric hypotheses we unhesitatingly rely on an instrument—our own mental apparatus—that is in most cases not only uncalibrated but even biased against giving its owner the correct results (for, when judging other people's minds, the more strongly we feel we are right the greater the danger that we are wrong). This is one reason for the urgent need to ensure as an integral part of normal medical education that students and trainees (especially prospective psychiatrists and general practitioners) receive effective help to overcome their subjective biases.¹⁻³—I am, etc.,

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Training of Surgeons

SIR,—In reply to Mr. R. M. Kirk's letter (19 August, p. 468) on the training of surgeons, may I be permitted to make the following points? The primary Fellowship examination is solely a test of theoretical knowledge. The final examination may be