with my medical occupations to be able to cultivate their company. I should certainly be unable to satisfy Minerva's curiosity about their physical ills. I never met Bertie Russell or Carrington; Lytton Strachey I knew only slightly, though he was kind to me. My closest involvement was with Virginia Stephen. I was living from October 1913 to July 1914 in a room at the top of the Stephen's house in Brunswick Square and came back one night to be told that Virginia had just been found unconscious in her room apparently suffering from a deliberate overdose of drugs. The story is well known from Leonard Woolf's autobiography—the headlong rush back to Barts to get a stomach tube and funnel and the time spent that night washing out her stomach with Sir Henry Head kneeling by my side. We were in time and she recovered. This took place before she had written any of her novels and I am pleased to think that I had a hand in making possible the production of this brilliant literary achievement.

GEOFFREY KEYNES

Brinkley, Cambs

Burst abdomen—a preventable condition?

SIR,—Your leading article on burst abdomen (26 February, p 534) will make all abdominal surgeons question their technique and choice of suture material. Many gynaecologists still use plain or chromic catgut to close the peritoneum and rectus sheath. This view is supported by standard texts, even though the disadvantages of both are listed in detail.¹⁻³

More than 35 000 caesarean sections were performed in England and Wales in 1972⁴ and the number may be increasing in the drive to reduce perinatal mortality and morbidity. Many of these operations are performed by resident doctors of varying experience. Fortunately partial or complete wound dehiscence is not common. But careless suturing with plain or chromic catgut and an ill-maintained Bonney-Reverdin needle is courting disaster, especially if there are other predisposing factors such as obesity, diabetes, and prolonged labour with its risk of peritonitis. If a non-absorbable monofilament suture is used to close the rectus muscle and sheath with big loose bites⁵ then it is virtually unknown for the abdomen to burst after section or hysterectomy, however radical. The Nesta technique³ obviates any chance of a chronic sinus down to an infected knot or a slim patient feeling a lump formed by the casts used to anchor the suture. Since 1962 I have used continuous nylon sutures to close peritoneum, rectus sheath, and skin. There have been no complete abdominal bursts after caesarean section. Recently, on the advice of Mr W G Mills, I have changed to polyethylene because of its better handling.

Not all caesarean sections should be performed through one of the fashionable transverse incisions. Acute fetal distress and placenta praevia are, I submit, indications for speedy delivery and for a vertical abdominal incision. Should a haematoma form it will soon discharge through a midline incision, while if it develops in a transverse wound pain, fever, and swelling persist unduly until reabsorption or evacuation occur. Suction drainage in fat women is not always satisfactory because of infection.

Repeat sections through transverse scars are not particularly troublesome, but the rectus

muscle may have to be divided and the interior epigastric artery formally ligated. Repeat sections are easier if monofilament sutures are used because there is less fibrosis. Single-layer closure deep to the skin has its advocates,⁶ although the skin can dehiscence more readily after a two-layer rather than a one-layer suture, with morbidity and ugly scarring. Most of us would use through-and-through sutures to repair a burst abdomen. On occasion, therefore, a primary single-layer closure may be justified—for example, when a patient has had a large number of abdominal deliveries. After all, Spencer Wells⁷ practised this technique successfully over a century ago.

A M SMITH

New Cross Hospital,
Wolverhampton

¹ Howkins, J, Stallworthy, J. *Bonney's Gynaecological Surgery*, 8th ed, pp 270 and 279. Baillière Tindall, London, 1974.

² Jeffcoate, T N A, *Principles of Gynaecology*, 4th ed, p 721. Butterworth, London, 1975.

³ Cohen, J S, *Abdominal and Vaginal Hysterectomy*, p 2. Heinemann, London, 1972.

⁴ Arthure, H, et al, *Report on Confidential Enquiries into Maternal Deaths in England and Wales, 1970-1972*, p 58. HMSO, London, 1975.

⁵ Jenkins, T P N, *British Journal of Surgery*, 1976, **63**, 873.

⁶ Dudley, H, *Lancet*, 1977, **1**, 305.

⁷ Shepherd, J A, *Spencer Wells*, p 66. Edinburgh, E S Livingstone Ltd, 1966.

Digoxin after heart failure

SIR,—The placebo-controlled trial which Dr Sylvia M Dobbs and others carried out (19 March, p 749) suggests that digoxin is useful in the long-term treatment of some patients after an attack of heart failure. The witch doctors knew of the efficacy of digitalis even before Sydenham discovered it in the seventeenth century and Withering re-discovered it in the eighteenth century.

Sir James Mackenzie proved at the start of the present century that cardiac glycosides are therapeutically effective only in patients with atrial fibrillation. This trial gives us no extra knowledge of the efficacy (or the reverse) of digoxin because 13 of the patients in the trial had fibrillation and the authors themselves claim that only 16 patients out of 48 may have benefited from the digoxin. Indeed, it would appear that the other 32 patients did not benefit.

B J O'DRISCOLL

Dublin

Hypercalcaemia after surgical treatment of Cushing's disease

SIR,—As illustrated by the very interesting case reported by Dr W W Downie and others (15 January, p 145) hypercalcaemia can be due to adrenal insufficiency. It may also occur after adrenalectomy for Cushing's disease,¹ in spite of substitution therapy, as we have observed in one patient.

A 43-year-old woman was admitted to a psychiatric institute because of a depressive syndrome. She also complained of asthenia, nausea, and diffuse pain for some weeks and had lost 10 kg during the last months. Cushing's disease had been treated by total adrenalectomy 2½ months before; replacement therapy consisted of oral cortisone acetate 25 mg daily and of intramuscular dexamethasone 25 mg every three weeks.

Blood measurements revealed hypercalcaemia of 3.54 mmol/l (14.2 mg/100 ml) and a slight

increase in plasma creatinine concentration to 0.16 mmol/l (1.8 mg/dl); plasma phosphate was 1.42 mmol/l (4.4 mg/dl), sodium 138 mmol/l, potassium 4.5 mmol/l, and bicarbonate 23 mmol/l.

Administration of isotonic sodium chloride and glucose, one litre of each intravenously daily, and hydrocortisone 125 mg intramuscularly daily corrected the clinical and biological abnormalities within five days. From this moment the dose of cortisone was gradually reduced to the initial level, at which it was maintained. No recurrence of hypercalcaemia has so far been observed over a seven-year follow-up period.

This case indicates that adrenalectomy for Cushing's disease, by the acute reduction of very high corticosteroid levels to the more physiological levels expected from the usual substitutive therapy, can lead to hypercalcaemia as well as spontaneous adrenal insufficiency.

M FUSS
J CORVILAIN

Department of Internal Medicine,

F GREGOIRE

Institute of Psychiatry,
Hôpital Universitaire Brugmann,
Brussels

¹ Sprague, R G, Kvale, W F, and Priestley, J T, *Journal of the American Medical Association*, 1953, **151**, 629.

Rubella vaccination

SIR,—The article by Dr Catherine S Peckham and others (19 March, p 760) on the low uptake of selective rubella vaccination by older schoolgirls recommends an increased effort to implement the programme. We suggest that such an effort is likely to be unproductive and that the policy of selective vaccination is wrong.

Krugman¹ has shown that the routine immunisation of all boys and girls in the USA since 1969 has reduced the incidence of rubella and congenital rubella to "all-time lows." Congenital rubella is preventable and we are failing to prevent it by operating the wrong policy. Rather than trying to make a bad policy work better, it should be changed forthwith.

CHARLES BROOK
EUAN ROSS

Central Middlesex Hospital,
London NW10

¹ Krugman, S, *Journal of Pediatrics*, 1977, **90**, 1.

Fibrinolytic activity in health and vascular disease

SIR,—We thank Dr T W Meade and his colleagues (26 March, p 837) for their comments on our paper (19 February, p 478) concerning fibrinolytic activity in health and vascular disease and were interested to see their own data. We were as concerned as they about the effect of age and sex on the "normal" values and looked at all of our data, separately and collectively, for evidence of the effect of these factors. Although we were able to find a relationship between age and plasma fibrinogen in all groups, none showed a relationship between age and fibrinolysis.

We chose to compare the patients with the normal ambulant subjects for two reasons. Firstly, and contrary to the unjustified statement in the penultimate paragraph of Dr Meade and colleagues' letter, all the patients except those with carcinoma, were *active, working, ambulant* outpatients and in no way