We believe that the doses used in the Guy's Hospital trial are, on a priori grounds, less than optimal for the destruction of residual tumour after surgery (though lethal to lymphocytes in the regional nodes). The trial has therefore compared radical surgery plus suboptimal radiotherapy with partial surgery plus suboptimal radiotherapy. The results are very much as might have been predicted, certainly so far as local recurrence is concerned.

It is regrettable that fuller use was not made of the potentialities of radical radiotherapy, the application of which would have made the conclusions of the trial more meaningful, and perhaps quite different.—We are, etc.,

E. STANLEY LEE
K. A. NEWTON
G. WESTBURY

Westminster Hospital,
London S.W.1

MARGARET F. SPITTLE

Middlesex Hospital,
London W.1

¹ Ellis, F., *Clinical Radiology*, 1969 **20**, 1.

² Fletcher, G. H., *Cancer*, 1972, **29**, 545.

³ Shukovsky, L. J., *American Journal of Roentgenology*, 1970, **108**, 27.

Chromosome Banding

SIR.—Chromosome banding is due to the breaking of H bridges that link nucleotides or other compounds of the DNA. The phenomenon, called denaturation,¹ has important consequences for chromosome identification, among others. Caratzali *et al.*² have shown that certain tuberculostatic drugs—among which para-aminosalicylic acid (PAS)—administered in vitro in cultured human leucocytes 20 hours before harvest, give rise to numerous denatured metaphasic plates. The addition of para-aminobenzoic acid in these conditions, either alone or with PAS, also results in the production of denaturation. It is, therefore, likely that para-aminobenzoic acid ($C_6H_4NH_2COOH$) and PAS ($C_6H_4NH_2OHCOOH$), competitive metabolites, should act by disturbing the normal appearance of crystalline bridges H. At present, in my laboratory, experiments are being carried out, using another anti-metabolite of para-aminobenzoic acid, sulphonyl-amide.—I am, etc.,

A. CARATZALI

Bucharest,
Romania

¹ Rice, S. A., Doty, P., *Journal of the American Chemical Society*, 1957, **79**, 3937.

² Caratzali, A., Roman, I.-C., Cirnu-Georgian, L., Geormaneau, C., *Comptes Rendus Académie des Sciences. Paris, Série D.*, 1972, **274**, 1198.

Stress and the Schizophrenias

SIR.—I read with interest your leading article "Stress and the Schizophrenias" (3 June, p. 550). In discussing the work done by Surgeon Captain G. G. Wallace¹ you expressed surprise at the inverse ratio between severe stress and favourable outcome in the schizophrenias. However, to my mind, this relationship would seem to be a most logical one, since it is well known that, generally speaking, the more "reactive" factor in mental illness, then the better its prognosis.

This would seem to be reasonable, since if a person succumbs to mental illness only after considerable stress, then the implication is that he has a great deal of inner strength

and reserve to cope with many of his life problems.—I am, etc.,

STANLEY JACOBS

Shenley Hospital,
St. Albans, Herts

¹ Wallis, G. G., *British Journal of Psychiatry*, 1972, **120**, 375.

Aetiology of Varicosity

SIR.—Having long since been converted to the belief that bran should be an essential part of our diet, I agree with most of what Mr. D. P. Burkitt (3 June, p. 556) says. However, I find it difficult to support wholeheartedly his concept of the aetiology of varicose veins, since I believe heredity is the most important primary cause. Evidence for this is shown not only by the high familial incidence but by the tendency for the same group or groups of tributaries to be affected in successive generations. There is also the fact that veins which are not direct tributaries of either the long or the short saphenous veins frequently become varicose. Examples of this are the vein which courses over the patella and ascends on the anterolateral aspect of the thigh, veins running up the lateral aspect of the calf, and those on the posterior aspect of the thigh, which drain into the gluteal veins. It is also well known that incipient varicose veins are to be found in children around the age of 11 years. These veins then disappear during adolescence only to reappear later, usually with the first pregnancy.

I suspect that the increasing incidence of varicose veins among American Negroes and New Zealand Maoris is more likely to be due to interbreeding than to a change in environment and diet. In my view the secondary causative factors, such as pregnancy, prolonged standing, increased abdominal pressure due to straining at stool, etc., will only aggravate the condition of varicose veins in those patients in whom the genetic tendency already exists but will never cause varicosities in patients who do not possess this inherited weakness.—I am, etc.,

GORDON S. RAMSAY

London W.1

SIR.—Mr. D. P. Burkitt (3 June, p. 556) is correct in stating that haemorrhoids are not rare in Southern Nigerians. Among 3,539 outpatients seen at a rural health centre in Western Nigeria 11 had symptomatic haemorrhoids.¹

Although these villagers still have largely traditional eating habits and eat food with a high fibre content, there is a common belief that haemorrhoids result from eating sugar and sweet foods.—I am, etc.,

G. B. WYATT

Liverpool School of Tropical Medicine,
University of Liverpool

¹ Wyatt, J. L., and Wyatt, G. B., *Annals of Tropical Medicine and Parasitology*, 1967, **61**, 224.

SIR.—I am not competent to comment on Mr. D. P. Burkitt's main thesis (3 June, p. 556), but may I query one of his fundamental assumptions—that piles are merely varicose veins in a particular anatomical situation. This view of piles dates from Morgagni in the 18th century and, though contested by several authors in the 19th

century, by the end of the century had acquired general acceptance and today has become almost axiomatic. Yet anyone looking at prolapsed piles, or introducing a speculum when they are present, sees what in fact piles are—exaggerated protrusions of the bowel lining at the anorectal junction. Gabriel, whom Mr. Burkitt quotes in another connexion, and Hughes² are the only two modern authors that I have been able to find who recognize this fact.

The uncritical acceptance of piles as varicose veins has resulted in an unnecessary narrowing down of studies on their aetiology to primary venous factors.—I am, etc.,

DAVID PATEY

London W.1

¹ Gabriel, W. B., *The Principles and Practice of Rectal Surgery*, p. 110. London, Lewis, 1963.

² Hughes, E. S. H., *Surgery of the Anus, Anal Canal and Rectum*, p. 129. Edinburgh, Livingstone, 1957.

Fish Cornea for Grafting

SIR.—In this part of the world corneal opacities, vascularization, and degeneration are common and mostly bilateral, causing serious deterioration in vision. The only treatment is a corneal transplant,¹ which is not possible because of the problem of obtaining human donor material. This led me to use freshly obtained fish cornea. The post-operative results have been encouraging, and I would like to report two cases of corneal opacities successfully grafted with fish cornea. In both cases the graft took with normal healing and without any postoperative complications. The lamellar graft remained clear with considerable improvement in vision while the penetrating graft became opaque later.

The first patient, a man aged 70, had almost total corneal opacities in both eyes. There was some superficial vascularization of the left cornea and rather deep vascularization of the right cornea. Both eyes were free from active inflammation and there was no evidence of trachoma or recent infection and the corneal scars were thought to be due to recurrent corneal ulcers in the past. The left eye was selected for the operation and a peritomy was done prior to the graft. Two weeks later a 7 mm lamellar corneal graft of freshly obtained fish cornea was made. The graft took: healing was normal. Two weeks after the operation the vision improved to finger counting, and he was able to recognize shapes and distinguish colours. The pupil could be seen clearly through the graft. The graft was clear when seen seven weeks after the operation.

A boy aged 4 had very dense corneal opacities in both eyes as a result of severe inflammation of both eyes when he was 2. He had no treatment at that time as none was available in the village where he lived. Although there was some superficial vascularization of both cornea and the left eye showed early staphyloma, both eyes were in a quiet stage. No peritomy was done in this case. A 7 mm full-thickness graft was made. Healing was uneventful. When the stitches were removed after three weeks it was found that the graft had become opaque and moderately vascularized although less so in the central part. A subconjunctival injection of cortisone was given. It was found that the child resented strong light, a sign which had not been present before operation.

The sea fish in both cases was rock cod (*Epinephelus areolatus*) locally known as hamoor. This particular fish was selected because it is known to live longer out of water and is therefore easily available while still alive.—I am, etc.,

MOINUL HAQ

Al-Mattum Hospital,
Dubai, Arabian Gulf

¹ Payrau, P., in *Corneo-Plastic Surgery*, ed. P. V. Rycroft. London, Pergamon, 1969.

Total Replacement of the Hip

SIR,—Drs. R. H. Ellis and J. T. Mulvein (27 May, p. 528) have failed to draw the distinction between patients undergoing total hip replacement and those receiving prosthetic femoral heads for subcapital fractures. Transient hypotension following the insertion of acrylic cement into the femoral medulla is common.¹ Rarely is the hypotension severe. We have shown² that the hypotension corresponds in time with high levels of mono methyl methacrylate measured in the circulation during total hip replacement in man. We do not doubt that a similar relationship exists in anaesthetized greyhounds.

Occasionally, more severe hypotensive episodes have been seen during implantation of acrylic cement into the femoral shaft in patients undergoing total hip replacement. Drs. Ellis and Mulvein quite rightly draw our attention to these patients. However, cardiac arrest and death during operation are very uncommon,³ and have for the most part been in patients undergoing femoral head replacement for subcapital fracture.⁴⁻⁶

We would agree that femoral head replacement in these unfit and elderly fracture patients may be attended by considerable risk, but we doubt that the use of acrylic cement in patients undergoing total hip replacement is cause for alarm.—We are, etc.,

HUGH PHILLIPS

Department of Orthopaedics,
Princess Alexandra Hospital,
Harlow, Essex

DAVID DANDY

Department of Orthopaedics,
Norfolk and Norwich Hospital,
Norwich, Norfolk

- ¹ Phillips, H., Cole, P. V., and Lettin, A. W. F., *British Medical Journal*, 1971, 3, 460.
- ² Phillips, H., Lettin, A. W. F., Cole, P. V., and Dandy, D. J. Paper read to the British Orthopaedic Association Research Society, March, 1972.
- ³ Charnley, J., *Acrylic Cement in Orthopaedic Surgery*. Edinburgh, Livingstone, 1970.
- ⁴ Dandy, D. J., *Injury*, 1971, 3, 85.
- ⁵ Peebles, D. J., Ellis, R. H., Stride, S. D. K. S., and Simpson, B. R. J., *British Medical Journal*, 1972, 1, 349.
- ⁶ Powell, J. N., McGrath, P. J., Lahiri, S. K., and Hill, P., *British Medical Journal*, 1970, 3, 326.

Coalminers' Pneumoconiosis

SIR,—Dr. J. P. Lyons and others (18 March, p. 713) criticize conclusions reached by Carpenter and his colleagues¹ and Cochrane and his colleagues² on the basis of representative samples from defined communities that, although miners and ex-miners had lower ventilatory lung function than non-miners, this was not attributable to simple pneumoconiosis. They maintain on the contrary that simple pneumoconiosis does cause impairment of ventilation. They suggest this

is due to emphysema which is undetected radiologically. Table 1 from their paper shows mean emphysema counts at necropsy in relation to the final radiological category of pneumoconiosis during life. The relevant figures are:

X-ray Category	Mean Emphysema Count
0	10.8
1	19.9
2 & 3	7.9
A	12.0
B	11.8
C	10.6

Since the emphysema counts were less in those miners with the more advanced categories (2 and 3) of simple pneumoconiosis than in those with either no pneumoconiosis at all or any of the other categories it would seem legitimate to conclude that the emphysema, which causes the disability in simple pneumoconiosis, is undetected at necropsy as well as radiologically. The conclusion drawn by Dr. Lyons and his colleagues seems to be in flat contradiction to their evidence. This does, however, support the view that neither ventilatory lung function nor emphysema is related to x-ray category of simple pneumoconiosis in coalminers in Glamorgan.—I am, etc.,

IAN T. T. HIGGINS

School of Public Health,
University of Michigan,
Ann Arbor, Michigan, U.S.A.

- ¹ Carpenter, R. G., Cochrane, A. L., Gilson, J. C., and Higgins, I. T. T., *British Journal of Industrial Medicine*, 1956, 13, 166.
- ² Cochrane, A. L., Higgins, I. T. T., and Thomas, J., *British Journal for Social and Preventive Medicine*, 1961, 15, No. 1.

Confusion with Clofibrate

SIR,—Your leading article "Confusion with Clofibrate" (3 June, p. 547) after an interesting discussion of recent trials in Edinburgh, Newcastle, and San Francisco, concludes that "The results at present available give general support to the current practice of prescribing clofibrate for patients with any degree of hyperlipidaemia. . . ."

Without any indication at all of what cholesterol and triglyceride levels constitute "any degree" of hyperlipidaemia, the conclusion is logically meaningless.

Practically, of course, it is highly meaningful; clofibrate will be more widely prescribed, and confusion will be worse confounded.—I am, etc.,

JULIAN TUDOR HART

Port Talbot,
Glam

SIR,—Once again¹ I write to advise caution before accepting that clofibrate affects platelet adhesiveness (3 June, p. 547). There were at least three claims²⁻⁴ in the 'sixties that clofibrate had an effect on various platelet function tests. Subsequently one trial⁵ specifically designed to repeat one of these studies failed to show any important change during treatment in 14 measurements of platelet function other than some prolongation of the bleeding time. Even this prolongation could have been due to a seasonal or methodological change, and has not been reported by others.

The concept of a double action of clofibrate on both lipid metabolism and on platelet function is attractive, but it is very noticeable that, to my knowledge, the claim of an effect on platelets has received no further support recently. Clofibrate is a fascinating drug. Its reported effects on the various aspects of cardiovascular disease are confused enough, as indicated in your leading article, without introducing the further confusion of an unproved effect on platelets.—I am, etc.,

J. R. O'BRIEN

Portsmouth and Isle of Wight Area
Pathology Service,
Portsmouth, Hants

- ¹ O'Brien, J. R., *Lancet*, 1968, 2, 1143.
- ² Carson, P., et al., *British Heart Journal*, 1966, 28, 400.
- ³ Gilbert, J. B., and Mustard, J. F., *Journal of Atherosclerosis Research*, 1963, 3, 623.
- ⁴ Chakrabarti, R., and Fearnley, G. R., *Lancet*, 1968, 2, 1007.
- ⁵ O'Brien, J. R., and Heywood, J. B., *Thrombosis et Diathesis Haemorrhagica*, 1966, 16, 768.

Legal Detention of Psychiatric Patients

SIR,—Dr. J. T. R. Bavin and Miss Mary Applebey (3 June, p. 590) have drawn attention to a situation which has concerned me for some time—namely, the equanimity with which some of our colleagues seclude or restrain informal patients in mental subnormality hospitals during periods of violent or other uncontrolled behaviour. If the basic premise underlying the informal admission procedure is that any informal patient aged 16 or over is free to leave hospital whenever he wishes, it seems obvious to me that colleagues risk a charge of interfering with the liberty of the subject every time they do this. It is perhaps surprising that their right to do this has never been tested in the courts.

In this Stoke Park Group, where only 2% of our 1,700 patients are under order, we try to avoid this risk by using Section 30 (2) Mental Health Act, 1959, normally followed by Section 25, whenever an informal patient requires seclusion or restraint. If this practice is followed I submit that there is no need to consider any additional formula or legislation as Miss Applebey and Dr. Bavin suggest.—I am, etc.,

W. ALAN HEATON-WARD

Stoke Park Hospital,
Bristol

Value of Thermography

SIR,—Dr. B. E. Nathan and others (6 May, p. 316) made a generalized conclusion that "mammary thermography is of no practical value in the differential diagnosis of symptomatic mammary disease."

The two infra-red scanning systems they used differ considerably in their specifications and the results obtained are not therefore comparable.¹ Simple resolution tests indicate that scanning a patient at 3 feet distance is likely to produce low definition thermograms with no clear distinction made between the superficial vascular pattern of the breast and the suspected hot spot.²

These thermograms, if read from Polaroid film by the radiologists without reference to the cathode ray screen image, are likely to introduce further loss of detail. On the basis of their evidence, the authors have