The "Rape" group you mention has been set up to explore the best ways of helping rape victims. Any doctor or health worker who has dealt with a rape victim is invited to write for a short questionnaire to 26 Talfourd Road, London S.E.15.—I am, etc.,

JUDY GILLEY

London N.W.11

¹ Amir, M., *Patterns in Forcible Rape*. Chicago, University of Chicago Press, 1971.

The Short-statured Child

SIR,—The study of causes of short stature by Lacy and Parkin,¹ which was discussed in your recent leading article (9 November, p. 308), indicated that of the children studied few with heights below the third percentile had organic disease. This investigation, undertaken in Newcastle, touches on the wider problem of the significance of short stature in children in relation to their health pattern on reaching adulthood. In a western society, to what extent does short stature in youth, due in part to failure to attain maximum potential of growth, affect the enjoyment of good health in later life?

In this connexion it would be very informative, as stressed elsewhere,² to have long-term information on the two series of children, in Boston⁴ and Iowa,⁵ who were studied several decades ago and whose anthropometric data are used as growth standards. Of these former pupils—now at middle age—among those who were of short stature compared with those who were of tall stature what are now the respective prevalences of obesity, hypertension, diabetes, and ischaemic heart disease? What have been their respective morbidity experiences since youth? Until information of this type is available is it legitimate, as is often done, to emphasize the desirability of children attaining their maximum potential of growth?

What is needed, of course, is follow-up studies of the Framingham type on series of children such that the numbers in the respective percentiles of height are sufficiently large to allow meaningful conclusions to be drawn. It is earnestly hoped that the longitudinal investigation being made at Newcastle will be continued long enough to furnish answers to some of the questions raised.—I am, etc.,

A. R. P. WALKER

M.R.C. Human Biochemistry Research Unit,
South African Institute for Medical Research,
Johannesburg, South Africa

¹ Lacy, K. R., and Parkin, J. M., *Lancet*, 1974, 1, 42.

² *British Medical Journal*, 1974, 4, 308.

³ Walker, A. R. P., and Richardson, B. D., *American Journal of Clinical Nutrition*, 1973, 26, 897.

⁴ Vickers, V. S., and Stuart, H. C., *Journal of Pediatrics*, 1943, 22, 155.

⁵ Jackson, R. L., and Kelly, H. G., *Journal of Pediatrics*, 1945, 27, 215.

Deaths in the Dental Chair

SIR,—Your balanced and admirable leading article (8 February, p. 293) needs one small correction: since October 1973 there have been not five but six deaths. You have omitted the case of the 10-year-old boy in Lancashire (27 April 1974, p. 224) who had

cardiac arrest during recovery from brief inhalational anaesthesia administered by a consultant anaesthetist—a case exactly similar to the Croydon one you report on another page (8 February, p. 342).

You might also have drawn attention to the useful suggestion of Professor P. Bramley and his colleagues (4 May 1974, p. 270) that a list should be initiated of approved dental anaesthetists (doctors and dentists), which would be of immediate help to the dentist who at present gives his own anaesthetics. This use of doctors or dentists, however, would be costly, and both are in short supply. The ultimate solution to the operator-anaesthetist problem, I have suggested,¹ might be to train paramedical anaesthetists for this work.—I am, etc.,

J. G. BOURNE

Salisbury, Wilts

¹ Bourne, J. G., *Lancet*, 1970, 1, 38.

SIR,—I read with interest and approval your leading article (8 February, p. 293). It is gratifying to see you confirming points I have been stressing for many years in my lectures to postgraduates attending courses organized by the Society for the Advancement of Anaesthesia in Dentistry—namely, (1) the need for correct equipment and facilities for treating emergency situations; (2) training of chairside assistants in the care of the unconscious patient; (3) continuous monitoring of (a) the cardiovascular system by means of a pulse-meter and (b) the respiratory system by observations of movements of the reservoir bag on a nitrous oxide/oxygen apparatus; and (4) the avoidance of prolonged surgical anaesthesia by the lone operator/administrator, who should confine his efforts to sedation, tranquillization, and analgesia.

Your plea for the abandonment of general anaesthesia in dentistry except in properly staffed and equipped centres, while admirable, is, I am afraid, a "pipe dream" until the requisite medical and nursing personnel are available. It is a pity that you do not give encouragement to those doctors who are attempting to organize training and certification of dental anaesthetists by apprenticeship.¹

With reference to your medicolegal report on two dental deaths (8 February, p. 341), in the case of the late Mr. Crowther it is impossible to state at which point in the proceedings fatally irreversible damage occurred to cerebral and cardiac tissue or whether it was due to a cumulative effect. But in your report no reference is made to the fact that the ambulancemen while abandoning pulmonary inflation with oxygen (or anything else) and any other form of resuscitation for the slow journey from dental surgery to ambulance along a twisting corridor and down a steep staircase of 23 steps with a U-turn at the top and an S-turn at the bottom, also carried the collapsed patient seated upright in a carrying-chair. The reduction in cerebral oxygenation which would occur during this manoeuvre is obvious.—I am, etc.,

DONALD BLATCHLEY

London W.4

¹ Bramley, P., et al., *British Medical Journal*, 1974, 2, 270.

SIR,—In a short study of anaesthesia in general dental practice in 1970¹ I reached three conclusions:

(1) "That there is an important economic factor in the safety of general anaesthesia in that modern techniques take longer and are more expensive."

(2) "That dentists are at present having to subsidise general anaesthesia in general practice out of other earnings."

(3) "That the present system of payment is a disincentive on the dentist to improve his facilities and apparatus, and gives no encouragement to the employment of skilled or experienced anaesthetists."

These conclusions are still valid today, so here at least is one area where action could be taken. The British Dental Association has dragged its feet in this important matter for too long.—I am, etc.,

E. O. EVANS

Stratford-upon-Avon

¹ Evans, E. O., *Journal of the Royal College of General Practitioners*, 1970, 20, 72.

Malignant Hyperpyrexia

SIR,—The implication in your leading article (30 November, p. 488) that nitrous oxide is yet another anaesthetic drug which may trigger the malignant hyperpyrexia (M.H.) response and the apparently successful treatment of one such case with dexamethasone¹ neither advance the understanding of the pathogenesis of this syndrome nor provide a rational basis for treatment. It is, moreover, unfortunate that undue emphasis is laid upon the temperature rise when defining the syndrome. This is a symptom not necessarily directly proportional to the rapidly developing acidosis, hypercarbia, hyperkalaemia, and tachycardia which are characteristic of M.H. and which can be readily detected.

Investigations into porcine M.H. have provided the only information from controlled and systematically conducted studies,^{2,3} which are not usually possible in man for ethical reasons and also because of the sporadic and quite unexpected occurrence of cases. It is certainly justifiable to exercise caution when transposing data from one species to another, but to dismiss studies on pigs on the basis of Britt et al.'s⁴ somewhat tenuous evidence is neither reasonable nor valid. Defects of the calcium-accumulating ability of the sarcoplasmic reticulum or even of mitochondria suggest attractive explanations for the aetiology of M.H. in both people and pigs. However, if sufficient care is taken in the preparation of these subcellular organelles to prevent the extensive protein denaturation that occurs when muscle is allowed to develop rigor at temperatures greater than 30°C, or if these effects are taken into consideration, the apparent loss of functional capacity of the sarcoplasmic reticulum and the mitochondria can be explained.⁵⁻⁷ In M.H.-susceptible pigs the stimulation of any biopsy technique produces intense muscle contraction with a rapid acceleration of glycolysis and a fall in pH of the sample to that of muscle in rigor. Moulds and Denborough⁸ have also reported the extreme sensitivity of susceptible human muscle to a wide variety of unrelated stimuli, presumably with similar biochemical effects. On these grounds it is likely that

biopsy of patients or hyperthermic individuals would provide material of doubtful value for detailed biochemical investigations in vitro.

We have used nitrous oxide in conjunction with thiopentone to anaesthetize more than 150 susceptible pigs without triggering M.H. Our experience in pigs therefore appears to conflict with that of Ellis *et al.*¹ which incriminated nitrous oxide in a single human patient. This suggests that the aetiology is not entirely a pharmacological effect but may be associated with some other aspect of anaesthesia.

The observation of Ellis *et al.* that M.H. may be satisfactorily treated with large doses of glucocorticoids will no doubt lead to the development of several hypotheses on the mode of action of these drugs, as occurred following the use of procaine. It should also be remembered that when no specific therapy could be recommended 36% of the patients survived.⁹ Thus isolated case reports should be considered with caution until any new therapy can be critically appraised.¹⁰—We are, etc.,

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DAVID LISTER

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¹ Ellis, F. R., *et al.*, *British Medical Journal*, 1974, 4, 270.

² Berman, M. C., *et al.*, *Nature*, 1970, 225, 653.

³ Nelson, T. E., *et al.*, *Anesthesiology*, 1972, 36, 52.

⁴ Britt, B. A., Webb, G. E., and LeDuc, C., *Canadian Anaesthetists' Society Journal*, 1974, 21, 371.

⁵ Greaser, M. L., *et al.*, *Journal of Food Science*, 1969, 34, 125.

⁶ Greaser, M. L., *et al.*, *Journal of Food Science*, 1969, 4, 633.

⁷ Cheah, K. S., *Journal of the Science of Food and Agriculture*, 1973, 24, 51.

⁸ Moulds, R. F. W., and Denborough, M. A., *British Medical Journal*, 1974, 2, 241.

⁹ Britt, B. A., and Kalow, W., *Canadian Anaesthetists' Society Journal*, 1970, 17, 293.

¹⁰ Lucke, J. N., and Lister, D., *British Journal of Anaesthesia*. In press.

Not Only Leeds but Also . . .

SIR,—I refer to your leading article (8 February, p. 297) entitled "Leeds Infirmary Blues." I question strongly your indications for having chosen the predicament of Leeds in preference to similar states currently enjoyed elsewhere. Does this mean that the *British Medical Journal* has elected to support only this city in its effort to compete successfully for limited available financial resources?

A leading article in the *B.M.J.* could have considerable effect on the Department of Health and Social Security to the advantage of Leeds but perhaps to the disadvantage of other places. For example, Sheffield University also has expanded its medical school and the hold-up of the hospital building programme here will prejudice similarly its success. Precisely the same "cruel accident of timing" has robbed one of the Sheffield hospitals of its most critical stage of redevelopment, seriously jeopardizing medical teaching and patient care albeit in a more subtle fashion than in Leeds. One could cite a comparable state of affairs in Birmingham.

I have no desire to denigrate Leeds but to

question your decision to single out this particular case.—I am, etc.,

REGINALD ELSON

Orthopaedic Department,
Northern General Hospital,
Sheffield

SIR,—If the Government cannot afford to finance the hospital project which is so badly needed, why do the citizens of Leeds not raise the money and build the hospital themselves?

A city of half a million people, with a lot of industry, could easily produce £12m. if it made up its mind to do so. Then they could rent the hospital to the N.H.S.—I am, etc.,

R. H. TOWNSHEND

Sheffield

Reorganization and Nurse Training

SIR,—I feel obliged to respond to a number of points made in the letter signed by various consultants working at the North Tees General Hospital (8 February, p. 330).

In the first instance reference is made to a loss of independence and yet, in the re-organized service, the district management team with its medical component is directly responsible to the area health authority for day-to-day management of district services. It seems to me that this, coupled with medical membership of the A.H.A. and the medical advisory machinery, constitutes a substantial degree of "involvement" by any standard.

Then it is asserted, in anything but gallant fashion, that the area nursing officer has no local loyalty even though, in contrast with the bulk of the signatories, her roots are in the area, to which she has returned after a distinguished career elsewhere. I consider this unprovoked attack on my area nursing officer by gentlemen of the medical profession most unbecoming and not one I have come across in some 22 years of voluntary service in the health field.

It is disturbing to note also in the letter an ignorance of what is implied in an area nurse training school. In fact, as was explained at a meeting convened to clear away these misconceptions, it would involve simply a linking together of existing schools and the various area-based training courses under the guidance of a director of nurse education. One might have expected the facts to have been established in the first instance by the signatories of the letter, but at least following clarification at this meeting, which was attended by two of them, the letter should surely have been withdrawn.

The letter goes on to question the good faith of the area health authority and its officers by the most unworthy innuendo that the concept of the Cleveland Area Nurse Training School did not in fact emanate from the General Nursing Council, which had actually earlier been requested by my Authority to approve a continuation of the three district schools, and here one can only call for a withdrawal and apology.—I am, etc.,

CLAUDE FAIRWEATHER

Chairman,
Cleveland Area Health Authority

Middlesbrough, Cleveland

Community Health Specialists

SIR,—Few will agree with the jaundiced view of community physicians as seen through the vaginal speculum by Mr. A. F. Pentecost (8 February, p. 330). The job specification mentioned is either incorrect or quite unusual.

Mr. Pentecost could make three valid points. Firstly, the former flexibility in making community health appointments according to local need vanished with the destruction of the "all-purpose" local authority health services of the former county boroughs. Secondly, there are now no journals specializing in community medicine, so that the previous weekly forum of correspondence and exchange of expert views and experience no longer exists, to the general detriment of the service. Thirdly, continuity of recruiting to community medicine withered some 15 years ago as more attractive conditions were offered in other branches of medicine. For all practical purposes training stopped long before the unification of the N.H.S. The consequences, highlighted by the St. Mary's smallpox episode, are that we are scraping the barrel to find any sort of reasonable candidate for consultant posts. What is even more alarming is the absence of any future replacement for the present generation of ex-medical officers of health.

In reply to Mr. Pentecost's query as to what we do, this week I have had a radio programme on the care of the dying, a series of problems involving alcoholics, drug addicts, geriatrics, mental illness, cruelty to the disabled, meningitis, and hepatitis, a trade union dispute on ward conditions, a matter about our cardiac ambulance, a sitting of the district management team on expenditure, a brush-up on major disaster procedure, and finally the organization of funds for terminal care. I am on 24-hour call one in three for infectious disease and on single-handed permanent call on a 40-mile (64-km) radius for smallpox. By comparison, Mr. Pentecost's forays into the female pelvis represent a limited area of action.—I am, etc.,

W. S. PARKER

District Community Physician,
Brighton Health District

Brighton

SIR,—After witnessing during the past several months the financial poverty of the hospital service I have some sympathy with Mr. A. F. Pentecost's observations (8 February, p. 330) to the effect that further appointments of area specialists in community medicine should be curtailed. The problem is that without substantial assistance area medical officers will be unable to fulfil responsibilities such as "drawing up planning guidelines on area operational health care policies and priorities for district management teams and reviewing and challenging district plans and budgets for the operational health care services" (see the "grey book"). These kind of responsibilities become more complex the greater the number of districts in an area.

Mr. Pentecost says that the time has come to stand out against this whole farce, but the time has long since gone, as the profession would have been better served if he and others had been outspoken before N.H.S. reorganization. Perhaps the solution