she believes this to be "the cross she must bear" and that it will resolve itself after she has had a child. That this myth should still persist is of little comfort to the young girl or, indeed, any woman. Childbirth itself is no permanent cure for spasmodic dysmenorrhoea, since the pain in the menstrual cycle is associated with the ovulatory cycle, which, of course, in normal circumstances, recommences after childbirth.

Conventional treatment ranges from analgesics to oral contraceptives, and, while varying degrees of relief are obtained, each form of treatment has its own drawbacks. Analgesics of the aspirin and codeine variety produce symptoms of gastritis, replacing the pain from spasmodic dysmenorrhoea with epigastric pain. Oral contraceptives have their place, but prescribing these for the very young girl is fraught with ethical difficulties.

Over a period of 15 years I treated about 60 women suffering from spasmodic dysmenorrhoea with cyclandelate and obtained consistently good results in relieving the pain. With 800 mg daily in divided doses for three days before the expected start of menstruation and for the first two days of the period itself the relief from pain was complete in many cases. Unfortunately, as often happens in clinical practice, one gains a strong subjective clinical impression which is later reinforced by similar clinical results, and consideration of objective measurements is not made until the therapeutic benefits in a number of patients are obvious. Thus, my experience with cyclandelate is based on my own subjective clinical impressions over a period of time. During the 15 years that I have prescribed cyclandelate I have not seen any evidence of side effects or teratogenicity.

I should be interested to learn if any of your readers have had any similar experience with this drug.—I am, etc.,

DOROTHEA KERSLAKE

Buckhurst Hill,
Essex

SIR,—With reference to your leading article (12 May, p. 323), having had first-hand experience of all the ills described in various degrees I can heartily endorse the views of the Drs. K. J. and R. J. Lennane.¹ However, I must defend the psychoprophylaxis of pain in labour as it is taught today. Though derived from the theories of Grantly Dick-Read, it is modified. Mothers are taught to expect pain, but by positive methods using sensory dissociation, physiological breathing patterns, and relaxation of voluntary muscle pain is minimized and labour is allowed to proceed at maximum efficiency. From this it follows that labour is shorter, little or no analgesia is needed, and therefore morbidity is kept to the absolute minimum. Recovery of both mother and baby is quicker, and a stronger link is forged between the two. Most mothers can look back on labour as a tremendously worth-while and satisfying experience. I can count myself among them.

Some obstetric units, though not officially teaching the method, are sympathetic to mothers using it and I believe are often quite surprised at the results. Far from meeting a "punitive attitude," many mothers have analgesia thrust upon them and have to make most emphatic denials. It is not appreciated that analgesia can so cloud the consciousness that the method can no longer work.

Unfortunately, there is still a great deal of prejudice against psychoprophylaxis, probably for precisely the same reasons as put forward in your article—namely, that doctors tend to be too authoritarian and, being predominantly male, can never really understand those common disorders affecting women and their offspring.—I am, etc.,

PRUNELLA E. NEWTON

Sale, Cheshire

¹ Lennane, K. J., and Lennane, R. J., *New England Journal of Medicine*, 1973, 288, 288.

A New I.U.C.D. for Nulliparous Patients

SIR,—Your timely leading article (7 April, p. 2) reminds us that intrauterine devices are a valuable means of contraception and that nulliparous patients need not be denied this protection. I would like to report early experience with a new plastic I.U.C.D., similar to the 33 S and 32 S Saf-T-Coils, but re-designed to suit the nulliparous uterus. This is the 25 S device which is compared with the Gravigard Copper 7 (left) and small Dalkon shield (right) in the accompanying figure.

A pilot study in unselected patients was started in July 1972. Forty insertions have now been made with follow-up for between five and 10 months. Twenty-two patients were nulliparous, seven had previously born children or had miscarried, and 11 had been aborted. Seventeen patients were single. Ages ranged between 20 and 34 years. Insertions were particularly simple using a special flexible intrauterine sound without tenaculum forceps. Neither cervical dilatation nor local anaesthesia was necessary. The device was fitted after diagnostic dilatation and curettage in one case and following pregnancy termination in four others. Postinsertion discomfort occurred in six patients but resolved with analgesics.

Gonococcal salpingitis was diagnosed in one case, a beta-haemolytic (group A) streptococcal vaginal infection was found in another, and four patients had non-specific vaginitis. All responded to treatment without removal of the device. Conjugated equine oestrogens were used effectively in two patients who developed moderate menorrhagia but in other patients menstruation was not adversely affected. No pregnancy occurred in this series. One device was expelled after five days. Three devices were removed, one for severe discomfort two hours after insertion and two at the patients' request for later minor symptoms.

The small Dalkon shield and the copper 7 are very effective in many nulliparous uteri. But the former may sometimes need to be fitted under local anaesthesia or intravenous sedation with pethidine and atropine, while

the latter requires handloading and the degree of copper absorption is unknown. The 25 S device, on the other hand, does not seem to have any significant disadvantages and it is now commercially available in Britain (London Rubber Industries). However, exact fitting is essential, as well as proper follow-up if the 25 S is to be successful on a large scale.

Where systemic medication with the contraceptive steroids is contraindicated, or rejected by the nulliparous patient, or simply not practical, the 25 S device offers an excellent alternative and simple means of fertility control.—I am, etc.,

DESMOND BLUETT

London W.1

Diabetes Mellitus and Refined Carbohydrate

SIR,—May we reply to Dr. H. C. Trowell's inquiry (12 May, p. 365)?

Three types of maize meal are common in Rhodesia: straight-run meal containing 2 g crude fibre/100 g used by Government institutions and labour contractors, roller meal (0.8 g crude fibre/100 g) used in the rural areas, and pearl meal (0.2 g crude fibre/100 g) which is preferred by the urban population. We have previously suggested¹ that the amount of crude fibre in maize meal may be less important than its speed of digestion and absorption from the alimentary tract. Bread which contains 0.1 g crude fibre/100 g is digested by amylase in vitro five times faster than cooked pearl maize meal (0.2 g crude fibre/100 g).—We are, etc.,

A. C. B. WICKS
J. J. JONES

University of Rhodesia,
Salisbury, Rhodesia

¹ Westhuysen, J. van der, Mbizvo, M., and Jones, J. J., *Lancet*, 1972, 2, 719.

Incidence of Postoperative Deep Vein Thrombosis in the Tropics

SIR,—I refer to two articles on postoperative deep vein thrombosis (3 March, pp. 515 and 517), the first involving patients in the Sudan by Mr. M. A. Hassan and others, and the second in a Queensland hospital by Mr. O. B. Williams and others.

My own experience in Vietnam in 1968 in a civilian hospital confirms the low incidence of deep vein thrombosis, pulmonary em-

Comparison of Gravigard copper 7 (left), small Dalkon shield (right), and 25 S device against millimetre scale.

bolism, and coronary thrombosis as post-operative complications in this tropical country, in spite of the tendency of the Vietnamese to resist all encouragement to early mobilization. Australian surgeons who worked in the same environment over the years of the Australian commitment to the Vietnamese people confirmed these impressions. Unfortunately, the Doppler technique and radioactive isotope scanning were not available in that country and therefore no figures can be presented to be compared with the Queensland and Sudanese findings.

The role of diet and/or nutrition would appear to be excluded by the experience in Queensland, where the dietary habits and build of repatriation hospital patients would be little different from those in the southern states of Australia in which the incidence of deep vein thrombosis is nearer to that in Britain and the United States. It therefore seems that climate may well be the possible answer, and further investigations on these lines are awaited with interest.—I am ec.,

K. B. ORR

Kogarah, New South Wales

Serum Antitrypsin Levels in Acute Hepatic Necrosis

SIR,— α_1 -Antitrypsin is a glycoprotein primarily synthesized by the liver.¹ Though severe hepatic disease does not usually result in low serum antitrypsin levels² acquired α_1 -antitrypsin deficiency may occur in cases of massive liver necrosis.³ To investigate this possibility we determined serum antitrypsin levels in a group of 14 patients with acute viral hepatic necrosis. Fifty-five blood donors and 35 patients with uncomplicated viral hepatitis were used as controls.

A single serum specimen only for α_1 -antitrypsin determination was obtained from each control subject. Sequential serum specimens were obtained during the first two weeks of hospitalization in the 14 patients admitted with a diagnosis of massive liver necrosis. A radial immunodiffusion technique was used to measure serum α_1 -antitrypsin concentration (normal levels: 212 ± 32 mg/100 ml).⁴ We tried to correlate serum antitrypsin levels with the mental state and other relevant clinical and biochemical findings which are characteristic of fulminant hepatitis cases. The following observations were made.

In all 14 patients with massive liver necrosis one or more serum specimens early in the hepatic course showed normal or raised antitrypsin levels. Subsequently, however, a moderate to substantial lowering of antitrypsin levels to the range observed in subjects with inherited α_1 -antitrypsin deficiency was noted in half the patients and four had severe α_1 -antitrypsin deficiency (range 27–68 mg/100 ml)⁵ at least transiently. No correlation between serum antitrypsin concentration and prognosis was observed. Thus, one case with persistently raised antitrypsin levels died and at necropsy diffuse submassive necrosis of the liver was found. Conversely, two patients who transiently developed severe "acquired" antitrypsin deficiency survived. In three patients who expired values were initially low but became normal before death. No correlation therefore exists between clinical outcome (death or survival) and a return to normal serum antitrypsin levels. In two patients, however,

a pronounced drop of α_1 -antitrypsin preceded an extreme depression of the prothrombin activity (less than 25% activity) and mental obtundation.

In patients with uncomplicated viral hepatitis serum α_1 -antitrypsin levels are raised for an average of 4–6 weeks. By inference, we suggest that a pronounced drop in the serum concentration of α_1 -antitrypsin, when it does occur, may be an early sign of massive liver necrosis.—We are, etc.,

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- 1 Schultz, H. G., and Heremans, J. F., *Molecular Biology of Human Proteins*, vol. 1, p. 688. New York, Elsevier, 1968.
- 2 Sharp, H. L., Bridges, R. A., Krivitt, W., and Freier, E. F., *Journal of Laboratory and Clinical Medicine*, 1969, 73, 93.
- 3 Lieberman, J., and Mittman, C., *Annals of Internal Medicine*, 1970, 73, 9.
- 4 Kupepers, F., *Humangenetik*, 1967, 5, 54.
- 5 Lieberman, J., Gaidulis, L., Garoutte, B., and Mittman, C., *Chest*, 1972, 62, 557.

Odds on Getting a Coronary

SIR,—I do not write in criticism of your informative leader on coronary disease (19 May, p. 375), but clinical experience would suggest to me that heredity plays some part in the aetiology of the condition and that an old-fashioned family history is therefore important in assessing the likelihood of thrombosis. Has this been statistically disproved, or might this be the primary risk factor mentioned which has gone undetected?—I am, etc.,

W. E. SNELL

Hambleden, Henley-on-Thames, Oxon

Management Arrangements for the N.H.S.

SIR,—From time to time professional and lay opinion expresses alarm at the implications of management applied to the National Health Service. On the one hand, professional interests fear interference with their traditional clinical freedom, and on the other, informed members of the public fear that managerial efficiency in the Health Service will be undemocratic.

Discussions with members of joint liaison committees throughout the country indicate that these fears may well be unfounded in practice. The Department of Health and Social Security is issuing guidance to joint liaison committees. It would appear that this guidance is not merely being modified to suit local circumstances but that it is often being ditched completely in the face of local pressures. It would appear that circulars from time to time are mutually contradictory; a notable example is that HRC(73)10 is incompatible with the previous issue HRC(73)4.

In the end all guidance rules and directives are subject to interpretation and this in turn will depend on the personnel who do the interpreting. On the present evidence 1984 is not yet upon us and it would appear to be a long way off as for many years to come the new wine of managerial experience will be dispensed from well-worn bottles.—I am, etc.,

H. P. FERRER

Health Department,
County Hall, Kendal, Westmorland

Representation of Hospital Doctors

SIR,—I would not like Dr. R. M. Mayon-White's letter (19 May, p. 424) to pass without comment. His sense of frustration and disillusionment is understandable. Unfortunately hospital doctors on the whole have no sense of common identity, and one can see the increased fragmentation of specialists leading only to more difficulty in representing their diverse interests.

I do feel we should acknowledge our appreciation of the job that Dr. Mayon-White has done and the immense amount of time he has spent on our behalf. It is impossible to satisfy all the people all the time but he has certainly tried.—I am, etc.,

ALAN P. GRANT

Belfast

National Conference of Hospital Medical Staffs

SIR,—About 185 doctors, of whom approximately 60 were members of the Central Committee for Hospital Medical Services, accepted an invitation to attend the second National Conference of Hospital Medical Staffs on 19 May 1973. The agenda was received by the attending doctors only a few days before the conference and there was no time for Regional Hospital Medical Services Committees to discuss the motions which were to be debated. The doctors at the conference could therefore only express their own personal views with regard to many of the motions which were debated for the first time at the conference. During the final 30 minutes or so of the conference there were approximately 60 doctors in the audience, perhaps a quorum, but no more, yet motions were still voted upon.

I would suggest that it is difficult to interpret the conclusions which were made at the conference in view of the fact that there were only 175 doctors present, allegedly representing thousands of senior and junior medical staff, though they had no mandate from their constituents as to how they would vote. In particular I would refer to your report (*Supplement*, 26 May, p. 64) which states that "the conference reaffirmed its support—by 102 votes to 30—for the consultant contract proposals approved by the 1972 meeting."

If this conference is to continue and to be meaningful there should at least be time for the agenda to be discussed by regional committees. It would be even more meaningful if the agenda could be circulated to all hospital doctors so that they could advise their representatives on the regional committees. To implement this suggestion would be quite expensive and if the Defence Trust cannot meet this expense then perhaps the conference should be discontinued.—I am, etc.,

C. COHEN

Stracathro Hospital
Brechin, Angus

**A notice was sent on 11 January to all honorary secretaries of Regional Committees for Hospital Medical Services setting out the timetable of pre-conference arrangements for the National Conference of Hospital Medical Staffs. This stated that the conference agenda would be sent to representatives on 7 May, and it was in fact dispatched on 8 May.—Ed., B.M.J.