Severity of Rhesus Haemolytic Disease

SIR,—We were interested to read the paper written by Dr. B. R. Pridmore and others (15 July, p. 136). We are concerned by the false prediction of the severity of haemolytic disease resulting from the contamination of liquor amnii by blood. One point which the authors mention but do not stress is the danger of feto-maternal bleeds.

During the past five years it has been the practice in our unit to screen the mother's blood for fetal cells before and immediately after amniocentesis, and a further screening is done 24 hours later. If fetal cells are present then this is taken into account when deciding on the time for induction. One further point of interest is that if the father is heterozygously rhesus positive the mother's blood is re-examined for fetal cells one week later, and if these are still present this is evidence that the fetus is probably rhesus negative.—We are, etc.,

ANNE E. McCANDLESS
R. M. SYKES

Sefton General Hospital,
Smithdown Road,
Liverpool L15 2HE

College of Anaesthetists

SIR,—The views expounded by your distinguished correspondents (19 August, p. 468) will undoubtedly "be carefully considered by anaesthetists before they answer the referendum" for they have been under discussion for many months. They raise straightforward, simple points made at many meetings at which this proposition has been discussed. They are published now, when it is hoped that all anaesthetists will answer the referendum, presumably *pour encourager les autres*. Therefore may I be allowed to express opinions equally sincerely held, although they too may have been enunciated verbally probably on an equal number of occasions? This seems desirable if only to ensure that the wider audience who read the *B.M.J.* may be aware that there is a contrary view among anaesthetists. I will attempt to deal with the arguments in the order chosen by your correspondents.

Firstly, the one representative body plea: "Such a college would encompass all the functions both of the Faculty of Anaesthetists and of the Association of Anaesthetists . . .". Quite apart from questioning the likelihood of a governing council of such a body being elected which, in this country, would be competent to give authoritative opinions on both academic and political matters, is such unification of two such dissimilar functions really desirable? The remarkably healthy development of the speciality of anaesthesia on both fronts over the last two and a half decades has been in no small part due to "duality" with good cross-representation as between the pioneering association, which originally in its wisdom suggested a faculty, considering it necessary to have a separate academic body, and the faculty in the Royal College of Surgeons. I may say that if the Association of Anaesthetists were to disappear I for one would do all I could to encourage the formation of another—perhaps a federation of the several specialist anaesthetic groups which are becoming a significant feature in our life,

if only to provide an alternative view to "The Establishment."

Financial considerations cannot be dismissed as easily as your correspondents wishfully think. A college subserving all functions—academic and political—could not be registered as a charity. One hesitates to think what would happen to such ancient and well founded establishments as the Royal College of Physicians and the Royal College of Surgeons if they were to lose their charitable status. They have certainly thought it worth while fighting for at some cost.

The "fragmentation followed by synthesis" argument which envisages a possible total unity within an "academy" is perhaps the most doubtful of all. To demolish that which is viable, strong, and fine in the hope that the old bricks may produce something better and stronger is to plan for great uncertainty. Such an academy, if it were ever to emerge, governed as would be likely by a smallish representative council could well be wide open to control by Government. At the least it would set the stage for the pattern of medical control characteristic of less democratic societies than our own.

Finally, your correspondents propound the "status" argument. Can it, at this stage, really be thought that our status depends on the institution to which we belong? Or that, if it is so thought, it would be improved by leaving an ancient royal college for a new "one among many?"

One further point I wish to make concerns the surgical team. Despite many non-anaesthetic openings for their skills, most anaesthetists spend most of their time working with surgeons for the benefit of the one person who really matters—the patient. The relationship is, if not unique, special. Will differing loyalties help that relationship and conduce to more harmonious working? I for one don't believe it.

I associate myself strongly with those who wish adamantly to oppose this move. May I express the hope that the Royal College of Surgeons, our college, will support us and not allow its great Faculty to disappear. I will continue to wear the regalia of the Faculty on appropriate occasions in preference to that of any other college to which I belong.—I am, etc.,

CECIL GRAY

Department of Anaesthesia,
Faculty of Medicine,
University of Liverpool

SIR,—The paragraph headed "College of Anaesthetists?" in the *Medical News* (19 August, p. 483) might appear to give a one-sided view of the document of information sent out by the Association of Anaesthetists of Great Britain and Ireland. This has been prepared and circulated in response to a resolution passed at the association's last annual general meeting, held in Birmingham in September 1971, instructing it "to determine the views of all anaesthetists, after all relevant information has been made available, concerning a unified organization for all anaesthetists." At this stage the drafting committee responsible for the document has been at great pains to make it as factual as possible, and while it suggests, as your notice states, that an independent college might achieve greater political recognition for anaesthetists and lead to an improvement in

the status of the specialty it might on the other hand do nothing of the kind. All we know at the moment is that anaesthetists, among them those of mature and respected judgement, have arrived at opposite conclusions.

The council of the association has expressed no corporate view as to the desirability or otherwise of the formation of an independent college. It is hoping to obtain the views of all anaesthetists on this question, and when these are known it will decide what action, if any, it wishes to take.—I am, etc.,

J. ALFRED LEE

President,
Association of Anaesthetists of
Great Britain and Ireland

London, W.C.1

Gin: Was it a Drug?

SIR,—I can hardly believe my eyes. Your report (*Supplement*, 5 August, p. 129) states: "the referees found it difficult to appreciate why it was thought necessary to prescribe so large a quantity as half a bottle of gin." The object of the prescription was presumably to utilize the euphoriant and sedative properties of alcohol in order to ease the passing of a dying man. Half a bottle would be used for this purpose in a few days even when helped out with morphine sulphate and cocaine hydrochloride.

I did not know that either morphine or cocaine were dispensed by the ml, as your report also suggests, but it is a long time since I prescribed anything. The net cost of the gin to Government funds, remembering that the tax goes from one pocket to the other, would be less than that of a few tetracycline tablets. If you were to ask the referees to dinner do you think half a bottle would be enough, even for aperitifs?—I am, etc.,

J. E. GRAY

Department of Anatomy,
Medical School,
The University,
Newcastle upon Tyne

Immunological Responses in Pregnancy

SIR,—The paper by Dr. Ronald Finn and others (15 July, p. 150) suggests a reduction in T-cell activity in pregnancy as possibly accounting, to some degree, for the ability of the fetus to evade immunological rejection. Their phytohaemagglutinin dose response demonstration is particularly persuasive evidence of the diminished transformation rate of lymphocytes in pregnancy. Our own experience suggests that this phenomenon varies according to the nature and normality of the pregnancy.

Their interpretation of the findings as indicative of decreased T-cell activity is probably correct. However, it is unlikely that B and T cells are functionally independent, and as autologous serum was present in their test system it could be that the reduced transformation rate is in fact a consequence of some humoral factor which in turn might reflect changes in the B-cell activity.^{1,2}

On the evidence given it is impossible to substantiate the claim that "the tuberculin reaction is depressed in pregnancy." It is well known that pelvic tuberculosis when it occurs in the female frequently leads to

infertility, so it would be expected that a group of pregnant patients would have a lower incidence of positive tuberculin tests than non-pregnant controls. Even if the controls were accurately matched for age and parity it would be desirable to do tests in the same individuals in the pregnant and non-pregnant state. Montgomery and colleagues³ did this and found no influence of pregnancy.—I am, etc.,

D. M. JENKINS
J. S. SCOTT

- ¹ Hellström, K. E., Hellström, I., and Brawn, J., *Nature*, 1969, 224, 914.
² Jenkins, D. M., and Hancock, K. W., *Transplantation*, 1972, 13, 618.
³ Montgomery, W. P., Young, R. C., Allen, M. P., and Harden, K. A., *American Journal of Obstetrics and Gynecology*, 1958, 100, 8.9.

SIR,—Dr. Sylvia M. Watkins (5 August, p. 353) has criticized our recent finding (15 July, p. 150) of a reduced phytohaemagglutinin transformation rate in pregnancy because we used a constant volume of whole blood and therefore did not have a constant number of lymphocytes. As the volume of whole blood was 0.4 ml and the final volume of the culture medium was 6 ml it is unlikely that this variable would have much effect on the final concentration of the lymphocytes. It should also be noted that Purtilo and colleagues¹ reached a similar conclusion using a fixed number of lymphocytes.—We are, etc.,

RONALD FINN
C. A. ST. HILL

Royal Southern Hospital,
Liverpool 8

- ¹ Purtilo D. T., Hallgren, H. M., and Yunis, E. J., *Lancet*, 1972, 1, 769.

Oral Contraceptives and Serum Amylase

SIR,—To the great number of biochemical alterations caused by oral contraceptives in the human organism we would like to add one more, which we recently observed.

Working with a new chromogenic method for the determination of α -amylase¹⁻³ we found high serum α -amylase values in several young women. It proved that these subjects were taking oral contraceptives. We then examined the serum α -amylase values of 80 control men, 55 control women, 40 women using oral contraceptives, and 61 pregnant women. The results were as follows:

Subjects	Mean Values (U/1, 37°C)
Control men ...	142±44 (S.D.)
Control women ...	167±45 (S.D.)
Oral contraceptive users ...	199±74 (S.D.)
Pregnant women ...	252±99 (S.D.)

Statistically highly significant differences were found between the values for control men and control women ($P<0.005$), control women and oral contraceptive users ($P<0.025$), oral contraceptive users and pregnant women ($P<0.005$), and between the values for control women and pregnant women ($P<0.001$). If we consider the normal range for control women to be the mean value ± 2 S.D. nine of the women using oral contraceptives had values exceeding the normal range, one having a value of 431 U/1 (37°C). The nature and source of the increased serum α -amylase found in subjects taking oral contraceptives and in pregnancy

remains to be established. The source is probably the liver, which has been found to be very sensitive to hormonal influences.⁴ Studies on the isoenzyme pattern in serum may clarify this point.

We have not observed increased α -amylase values in urine of patients using oral contraceptives. This is probably owing to the lower clearance value of α -amylase of non-pancreatic origin as compared with pancreatic α -amylase,⁵ which forms the bulk of the α -amylase excreted in urine.—We are, etc.,

H. ADLERCREUTZ
K. SOININEN
M. HARKONEN

Department of Clinical Chemistry,
University of Helsinki,
Meilahti Hospital
SF-00290 Helsinki 29, Finland

- ¹ Ceska, M., Hultman, E., and Ingelman, B.G.-A., *Experientia*, 1969, 25, 555.
² Ceska, M., Birath, K., and Brown, B., *Clinica Chimica Acta*, 1969, 26, 437.
³ Soininen, K., Harkonen, M., Ceska, M., and Adlercreutz, H., *Scandinavian Journal of Clinical Laboratory Investigation*, in press.
⁴ Adlercreutz, H., and Tenhunen, R., *American Journal of Medicine*, 1970, 49, 630.
⁵ Jacobsson, G., personal communication.

Lumbar Disc Problems

SIR,—At the end of the feature "Second Opinion, Please" (29 July, p. 285) it is stated that changes in the posterior joints of lumbar vertebrae are due to degeneration of the related discs. It is implied, but not specifically stated, that pain in the leg in such patients is due to nerve root irritation. While agreeing that degenerative disc changes can speed degenerative changes in the posterior spinal joints, and while agreeing that leg pain may be due to lumbar nerve root irritation, I believe that it is undue emphasis on the parts played by the intravertebral discs and the lumbar and sacral nerve roots that prevents this group of patients' symptoms being sufficiently widely understood and their symptoms controlled.

It was shown long ago¹ that irritation of deep structures in the spine will cause not only local pain but also pain referred to the appropriate segment. Naturally, unless such irritation damages a nerve there will be no loss of feeling, impairment of muscle power, or alteration of peripheral reflexes. It is pain of this type, associated with recurrent minor sprains of the worn posterior joints, which account for most of the backache and lower limb pain seen in my clinical practice. The sprain of the worn joints, caused either by chronic postural strains or more sudden vigorous efforts, differ in no material way from those which cause father to have pain and swelling in his knees a day or two after the "fathers and sons" cricket match. Similarly, the symptoms will subside if the joints are rested and they will not subside if the joints continue to be overused.

It is necessary, I believe, to treat all these many patients in a way similar to that used to treat any other injury and to maintain such treatment for the months needed to heal as fully as possible tough, sprained, worn structures. I suggest that patients should avoid all actions which hurt at the time or cause an ache later and improve training in mobility and muscle tone by painless exercises. Naturally, with worn posterior joints forced extension exercises cannot be

done painlessly and should be avoided and isometric exercises substituted.

When the patient understands why he is having pain he can often modify his way of working to avoid things which might hurt, and I think that this reduces the size of the group suspected of a functional overlay. Yet it is equally clear that as the abilities of the ageing athlete decline so do the abilities of the heavy manual worker and there are groups of workers or housewives for whom alternative employment cannot be found and who have to accept overuse of wearing joints and backache for long periods. Occasionally nature is kind to members of this group, who after some years of back discomfort of varying degree will produce sufficient scarring and osteophyte formation in the damaged area to improve stability and reduce pain. Emphasis on the disc problems of backache and sciatica tends to cause expectations in lay and medical sufferers that something is out of place and should be put back. The severe form of the acute episode comes from muscle spasm and will go when alternating painless movement is started, with or without manipulation, if the precipitating lesion is a sprain. If true persisting pressure from a disc protrusion persists the spasm will not go completely and returns readily.—I am, etc.,

A. H. G. MURLEY

Cambridge

- ¹ Lewis, T., and Kellgren, J. H., *Clinical Science*, 1939, 4, 47.

Propylhexedrine Chewing and Psychosis

SIR,—Recently, a case of schizophrenia was exacerbated by chewing the contents of several decongestant inhalers, and prompts us to question the easy availability of these proprietary substances to the public.

The patient was a 30-year-old single male, who lived with his mother. He had shown insidious change of personality at the age of 23 when he had become indolent, neglected his personal habits, and had discontinued regular work. He was not admitted to a mental hospital until the age of 27, when he became violent with his family and first exhibited frank schizophrenic symptomatology. He made a good response to E.C.T. and phenothiazine. Two years later the patient was admitted with auditory hallucinations, and improved with phenothiazine treatment. The patient was discharged to this hospital as a day patient, and kept on oral phenothiazines. At that time he showed marked affective blunting and a severe volitional defect. Four months later there was a further relapse. On this occasion it was known that he had discontinued his oral medication, and for the first time his habit of chewing decongestant inhalers was discovered. The patient was started on injectable long-acting phenothiazines and his mental state improved.

Two months later a further deterioration was noted, characterized by acute delusional mood and paranoid delusions. The patient admitted chewing decongestant inhalers and when persuaded to discontinue this practice his mental state improved without any further modification of his management. At this time urine examination by gas-liquid chromatography for amphetamines was reported positive for methylamphetamine, but subsequently corrected to propylhexedrine.