

the Council is most anxious that in trying to improve the constitution and organization nothing should be done which might weaken the Association or diminish its effectiveness as the voice of the profession." The Council has decided, therefore, that constitutional reform should be in the direction of closer co-ordination with the autonomous bodies, and its proposals envisage an extension of the craft organization, parallel with but independent of the B.M.A. hierarchy. Community physicians as well as general practitioners and hospital doctors should, it proposes, have local craft committees, and these committees should elect representatives to the craft conferences, which themselves would elect the three major committees responsible for the negotiation of their affairs. In practice, says the Council, the membership of the craft committees and conferences would almost entirely overlap that of the B.M.A. area committees and the Representative Body respectively, and it suggests a voting procedure to facilitate this.

The other modifications to the Chambers proposals which the Council thought necessary are relatively minor. It was unhappy with his suggestion that the main committees should consist of equal numbers of doctors above and below the age of 35, believing that whether or not a doctor is established in a career post is more important than his age; it has suggested that "due provision should be made for the representation" of junior doctors but that the details can be decided by the Representative Body when it debates the proposals. In the case of hospital staff the Council has suggested that the present system of two central committees should be retained, one for doctors in career posts and one for those in training grades. Again detailed arrangements could be worked out later. The Council believes that both Sir Paul's upper limit of 12 for the number of a committee and his suggestion that the term of office should be limited to three years with one renewal of three years are too rigid, though it has endorsed the principle behind them. Again it has suggested that detailed proposals can come later. The referendum procedure suggested by Sir Paul should, says the Council, be adopted.

The Chambers structure is attractively simple and would almost certainly have been the first choice had the B.M.A. been starting from scratch. The Council's decision to retain the autonomous bodies has necessarily led to its proposals being more complex: but they are designed to avoid hazards to which the B.M.A. might be exposed if the Chambers Report was adopted in its original form. Any narrowing of the basis of representation of doctors by the B.M.A., it is felt, could open the door to rival organizations claiming a place in negotiations with the Health Departments and the Review Body. This anxiety is understandable at a time when the implications of the Industrial Relations Act for the medical profession are still far from clear. There is also a considerable body of opinion within the autonomous committees that believes that each major group must retain the freedom to act alone if necessary to protect the interests of its electorate; and there is a risk that or more of the autonomous bodies might decide to go it alone outside the B.M.A. rather than surrender its present constitutional right to be the final judge of matters totally within its own branch of the profession. Certainly the general practitioner organization based on the Conference of Local Medical Committees and the G.M.S.C. has adequate finance to be viable outside the B.M.A. Furthermore the Government has already agreed to the retention of local medical committees within the new N.H.S. framework.

What seems certain—based on the experiences of the last 25 years—is that once the new structure of craft conferences and their constituent committees is established it will prove very difficult to dismantle it. The danger of the Council's proposals is that by strengthening and extending the democratic representation of the three major branches of the profession within their craft conferences and at area level the new system might prove so effective that doctors in those specialties would see progressively less need to belong to the B.M.A. as well—and the Association might then be left as a figurehead body, effectively representing only the minority groups. Already some B.M.A. members resent the fact that the quarter of their colleagues who pay no B.M.A. subscription seem to obtain the benefits of B.M.A. negotiations for nothing. As inflation leads to higher subscriptions to the defence organizations, the General Medical Council, royal colleges, and the defence trusts doctors will increasingly tend to ask which one they can drop from their obligations. Is it unreasonable to ask that any doctor who wants to play a part in decision-making within the B.M.A. should be asked to be a member?

The Council is right to stress the need for professional unity in the coming decade. Major challenges will have to be faced—not least in doctors' response to the increasing emphasis on management in medicine and their relationship with the rapidly growing professions based on the social sciences. A single, strong professional body is essential if medicine is to survive these challenges. There will not be time for a further reform of the B.M.A. constitution: the right answer must be found at the Special Representative Meeting in the autumn. Which structure is most likely to lead to greater unity and which to fragmentation of interests? Sir Paul Chambers spells out his solution at the end of his initial analysis: "The expedient of autonomy for any major committee of the B.M.A. represents a weakening of the democratic control of the Association by the Representative Body and also a weakening of the Association's authority both inside and outside the profession: it is an indirect blow at the Association's efforts to speak authoritatively for its members and for the profession as a whole." The Council, on the other hand, thinks the Chambers proposals are too great a gamble, and that the tried and tested autonomous machinery should be the basis of the new constitution. The choice is now the Representative Body's, but it is by no means an easy one.

¹ *British Medical Journal Supplement*, 1972, 2, 45.

Shortage of Cadaver Kidneys

Each year in Britain between 1,500 and 2,500 patients who develop renal failure could benefit from regular dialysis or transplantation.¹⁻⁵ Most under the age of 45 can now probably get treated at one of the specialist units set up in recent years throughout the country. This week the results of such treatment have been assessed in a comprehensive survey organized by a joint committee of the Royal Colleges of Physicians, Surgeons, and Obstetricians in collaboration with the British Paediatric and Renal Associations.⁶ The report reviews British experience in the management of chronic renal failure between 1967 and 1970, and, though complete national coverage was not achieved, the 1,120 patients in-

cluded in the survey must be a high proportion of the total treated in Britain in that period. The results are very similar to those in the European⁷ and international⁸ transplant series from the same era. After renal transplantation some 60% of patients and 40% of grafts survived for three years. Patients treated by haemodialysis alone had a better chance of survival—a conclusion which may also be drawn from European⁷ and predominantly American^{8,9} statistics, though with the caution necessary in retrospective analysis of unmatched groups.

The implications of these findings have been analysed by a team of doctors and computer scientists at the London Hospital, and their forecasts for the next five years are given in an article at p. 686. Dr. S. C. Farrow and his colleagues calculate that if units continue to accept patients at the present rate then by 1976 there would be about 1,700 patients on dialysis, mostly at home, and about 500 patients on functioning grafts. An increase in the intake of patients to the maximum possible rate and a reduction in the average waiting time for a transplant from two years to one could raise these figures to 4,000 and 1,000 respectively. But, say the London Hospital team, this considerable increase in the number of transplant operations would lead to only a relatively small increase in the number of patients alive with functioning transplants in 1976: since many would have died and others would have returned to dialysis. It could be argued, they say, that it would be better to rely on dialysis alone for the time being and to step up the rate of transplant operations only when patient and graft survival have improved with the advances that seem bound to come.

Such a view would seem unduly pessimistic. The Joint Committee report points out that whereas survival rates from dialysis seem unlikely to improve those from transplantation are getting steadily better, and it also stresses that the life of a patient with a functioning transplant is much more pleasant than that on dialysis. Even a 60% survival in a uniformly fatal disease is a great encouragement to those who work in the field and who daily encounter the patients who have achieved full social, sexual, occupational, and emotional rehabilitation, but it may fall short of the convincing demonstration that is needed to overcome the fears of the rest of the medical profession. If so this is unfortunate: for it is doctors outside the renal units who need to be convinced if more kidneys are to be made available. Shortage of cadaver kidneys compels the transplant team to accept poorer tissue matches than it would wish, and this prevents the improvement in long-term results which is needed to convert the waverers. Probably we have been aiming too low in tissue matching. The Joint Committee report shows that women fare worse than men after transplantation, and this probably reflects their higher incidence of cytotoxic antibodies after pregnancy.¹⁰ Such antibodies are not always easy to detect, and they imperil renal transplants even in the presence of a negative cross-match unless tissue matching is extremely close.¹⁰⁻¹³ Ideally every patient should be offered a "full house" match, but if we are to approach this ideal many more kidneys must be offered than are actually used. This requires a great deal of sympathy and altruism from colleagues who stand to gain nothing for their own patients in return.

¹ De Wardener, H. E., in *Ciba Foundation Symposium: Ethics in Medical Progress with Special Reference to Transplantation*, ed. G. E. W. Wolstenholme and M. O'Connor, p. 104. London, Churchill, 1966.

² Kerr, D. N. S., *Proceedings of the Royal Society of Medicine*, 1967, 60, 1195.

³ Branch, R. A., Clark, G. W., Cochrane, A. L., Jones, J. H., and Scarborough, H., *British Medical Journal*, 1971, 1, 249.

⁴ Pendreigh, D. M., *et al.*, *Lancet*, 1972, 1, 304.

⁵ McGeown, M. G., *Lancet*, 1972, 1, 307.

⁶ *Report of the Joint Committee on Maintenance Dialysis and Transplantation in the Treatment of Chronic Renal Failure*. London, Royal College of Physicians, 1972.

⁷ Parsons, F. M., Brunner, F. P., Gurland, H. J., and Harlen, H., in *Proceedings of the European Dialysis and Transplant Association*, 8, p. 3. London, Pitman, 1971.

⁸ Ninth Report of the Human Renal Transplant Registry, *Journal of the American Medical Association*, 1972, 220, 253.

⁹ Burton, B. T., Kineger, K. K., and Bryan, F. A., *Journal of the American Medical Association*, 1971, 218, 718.

¹⁰ Terasaki, P. I., Kreisler, M., and Mickey, R. M., *Postgraduate Medical Journal*, 1971, 47, 89.

¹¹ Bergentz, S.-E., Olander, R., Kissmeyer-Nielsen, F., Olsen, T. S., and Hood, B., *Scandinavian Journal of Urology and Nephrology*, 1970, 4, 143.

¹² Pierce, J. C., Cobb, G. W., and Hume, D. M., *New England Journal of Medicine*, 1971, 285, 142.

¹³ Oh, J. H., MacLean, L. D., MacKinnon, K. J., Gault, M. H., and Dossetor, J. B., *Transplantation*, 1971, 11, 92.

Physiology of the Fetus

A proper understanding of the physiology of the fetus is becoming an essential prerequisite in the training of obstetricians. It seems remarkable that such comment has to be made when adult physiology has been taught to medical students for so many years. It is even more remarkable that an acceptable standard of obstetric care has been provided for so many years when most doctors have only a few hazy concepts of how the fetus develops and responds to the stress of labour. There are several explanations for this apparent disregard of fetal physiology: the difficulty of studying even the animal fetus under physiological conditions; a deep distrust by clinicians of the relevance of animal studies to human problems; and the overriding need to ensure that pregnancy is safe for the mother. Nevertheless, it is still difficult to understand the failure of many obstetricians to recognize that though in most women pregnancy is a physiological event resulting in a healthy baby, in a few the environment of the fetus may become so adverse that future development may be permanently impaired.

A recent symposium on fetal physiology held in Cambridge to mark the centenary of Sir Joseph Barcroft's birth was attended by physiologists from all over the world including many friends and colleagues who knew him when he was professor of physiology at the university there. To Sir Joseph must go the major credit for laying the foundations of modern research into fetal life. Probably his interest in the fetus, which came late in life, originated from his interest in the greater affinity of fetal haemoglobin for oxygen to which he ascribed the ability of the fetus to develop normally. Once involved, Barcroft spent the major part of the latter years of his life studying all aspects of fetal life culminating in the publication in 1946 of his classic book *Researches on Prenatal Life*. Reading through this today one cannot be but impressed by the fact that most of his observations have been validated by subsequent work.

It is unlikely that many of Barcroft students realized the relevance of his work to clinical obstetrics, and most likely they dismissed its practical importance. Work reported at the Cambridge symposium showed that attitudes have changed remarkably and many obstetricians are now undertaking fetal physiological research. Much of the credit for the spread of knowledge must go to Barcroft's successors such as D. S. Barron in the U.S.A. and G. S. Dawes in Britain, who for many years have taken young clinicians into their laboratories for a period of physiological research.

The field of fetal physiology is so wide that it was with