

# More donor organs for transplantation

## Elective ventilation proposals

Waiting lists for kidneys and other organ transplants continue to increase each year (4,343 patients were waiting for a kidney transplant at the end of 1992) but the number of donor organs available for transplantation has not kept pace with the demand. This has given rise to much discussion among professional and lay organisations on how to increase the number of donor organs. Permission to use the organs of patients fulfilling brain death criteria is refused by the relatives in 20–40% of instances. It is no surprise that many people now advocate a change in the UK legislation whereby agreement to donation is presumed unless a specific objection has been recorded during life by the individual so that relatives will not need to give their approval. Indeed, this arrangement has proved successful in a number of European countries, particularly Belgium and Austria.

One other initiative which has the great advantage of being able to operate within the current legal framework and could markedly increase the number of donor organs if applied throughout the country, is elective ventilation of dying patients carried out for the purpose of organ donation only. It depends on being able to recognise, clinically, patients in general medical wards who have suffered cerebrovascular accidents and are in rapidly deepening coma and likely to progress to respiratory arrest and death within a short period of time (usually 24 hours). Before death occurs the patients are transferred to the ITU and ventilated until such time as brain stem death criteria are established when the usual processes of organ retrieval are instituted.

Experience at the Royal Devon and Exeter Hospital, where this scheme was initiated, and published in the *Lancet* on 12 May 1990, showed that such a scheme can work in practice and does significantly increase the supply of donor organs. Their protocol began on 1 May 1988, and over the next 19 months the team estimated that eight patients who would otherwise have been missed, became donors. When these individuals were added to those who became donors without reference to the protocol, ie had initially been admitted to the ITU, the donor rate (number of donors per million population per year) increased from 19.8 to 37.5. The average rate for the UK is 14.0 pmp per year, and that reached in Exeter enabled the equivalent of 27 kidney transplants per million population to be carried out, more than 2½ times the national average.

Even if the average increase across the country were not so great as this—if the scheme were adopted nationally—it would make possible many more kidney and other transplants every year. Further support for such a scheme came from a recent study in Wales on deaths occurring outside ITUs, which showed that on many occasions a patient, if ventilated, could have become an organ donor. In practice, each potential case has to be fully assessed for suitability both by the consultant in charge and by an intensivist from the ITU. The assessment will be based on an observed failure of all possible treatments to provide benefit, and the anticipated clinical course from the underlying pathology of cerebral haemorrhage, subarachnoid haemorrhage, cerebral thrombosis or other type of stroke. Brain tumour cases will usually be excluded because there is a tendency for death to occur more slowly, and so will those with general medical conditions that would preclude organ donation, for instance diabetes and severe hypertension (renal impairment for kidney/cardiac donation), sepsis and malignancy (for all donations). One very reasonable worry that a physician in charge of such a patient may have is that the patient after being placed on a ventilator will not fulfil brain stem criteria and survive in a persistent vegetative state. The recent guidelines afforded by the Tony Bland case may, however, enable such cases to be appraised more humanely in the future.

The legal and ethical aspects of elective ventilation have been considered in considerable detail by the medical ethics committee of the BMA. Its recommendations were subsequently approved by BMA Council. In essence, their support of elective ventilation for the purposes of organ donation alone was subject to adherence in each ITU to a comprehensive protocol which reflected pastoral views as well as the views of all the groups involved; also that relatives, partners or other close personal friends of the patient were consulted as fully as practicable. It was suggested that all centres in the UK wishing to become involved in elective ventilation should follow a common protocol, and that the British Transplantation Society should be encouraged to facilitate this. Since then much work has been done by the ethical committee of the British Transplantation Society to achieve this objective. A protocol has been drawn up for circulation to directors of transplant units, who it is hoped will take the initiative in introducing the policy into hospitals within the organ donor retrieval area for which the unit is responsible. The matter has also been considered at a recent meeting of this College's Committee on Ethical Issues in Medicine and the Council have now agreed

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to endorse the scheme of elective ventilation based on an accepted protocol and along ethical guidelines as referred to above.

Successful application of the scheme will, however, ultimately depend on its acceptance by ITU staff and the availability of beds in the ITU for this purpose. The whole ethos of ITU work is based on the saving of life, whereas the patients transferred there for elective ventilation are not considered to have any chance of survival. Those in charge of ITUs, when involved in discussion on schemes for elective ventilation, stress the current national shortage of beds. However, accurate information on the need for additional ITU beds is not available, and in a recent audit study carried out by the Royal College of Surgeons and Royal College of Anaesthetists a wide range of bed occupancy was found in the units investigated. Where there is considerable pressure on the ITU, this could be lessened at a lower cost by the provision of high-dependency beds.

Over a 12 months period only a small number of beds would be needed in any one ITU for elective ventilation, and there must be a number of ways of bringing ventilatory facilities into temporary use for this purpose. Nevertheless, the extra costs of using beds for elective ventilation cases could not reasonably be put onto the respective hospitals alone, and some scheme of funding does need to be devised. The grant recently introduced to cover costs of donor organ retrieval is a basis on which further funding could be given.

In conclusion, elective ventilation is a proposal for increasing the supply of donor organs for transplantation in this country. It has been shown to work, it has passed careful ethical scrutiny, it can operate within the current legal framework and has considerable support within the profession. Ministers now need to give their approval so that appropriate funding and other administrative arrangements can be put in place by the Department of Health.

### Royal College of Physicians of London DIPLOMA IN GERIATRIC MEDICINE

The Diploma in Geriatric Medicine is designed to give recognition of competence in the provision of care for the elderly and is particularly suitable for General Practitioner vocational trainees and Clinical Assistants. It is also suitable for aspiring candidates for any career post in Geriatric Medicine, or in allied fields such as the Psychiatry of Old Age, who wish to demonstrate their knowledge of the subject.

The next examination will begin on Tuesday, 12th October 1993. Application forms, together with the necessary documentation, must reach the College by Friday, 3rd September 1993.

Candidates must either have held a post approved for professional training in a department specialising in the care of the elderly, or have had experience over a period of 2 years since Full Registration or equivalent in which the care of the elderly formed a significant part.

Further details and an application form may be obtained from:

**Examinations Office,  
Royal College of Physicians of London,  
11 St Andrew's Place,  
Regent's Park, London NW1 4LE.**

### Royal Colleges of Physicians MRCP(UK)

#### Part 1

The next MRCP(UK) Part 1 Examination will take place on Tuesday, 5th October 1993.

Application forms accompanied by the necessary certificates and fee of £165 must reach the College of entry by Friday, 20th August 1993.

Prospective candidates should have been qualified for 18 months and may enter through any of the Colleges listed below.

#### Part 2

The next MRCP(UK) Part 2 Examination will begin on Tuesday, 14th September 1993.

Application forms accompanied by the necessary documentation and fees must reach the College of entry by Friday, 30th July 1993.

Prospective candidates should have been qualified for 2½ years and must comply with the regulations concerning training in acute medicine.

The Examination fees: *Written Section* £160 *Oral and Clinical Section* £185. The London College will require separate cheques. The Scottish Colleges will require a single cheque for £345.

**Royal College of Physicians of Edinburgh,  
9 Queen Street, Edinburgh EH2 1JQ**

**Royal College of Physicians & Surgeons of Glasgow,  
242 St Vincent Street, Glasgow G2 5RJ**

**Royal College of Physicians of London,  
11 St Andrew's Place,  
Regent's Park, London NW1 4LE.**