

## EDITORIAL / VAN DIE REDAKSIE

poorly done as to be meaningless. While there is general agreement on the notification and treatment of *symptomatic* congenital syphilis, the only point of note is that in no case is the treatment altered by cerebrospinal fluid findings. This calls into question the recommendation that lumbar puncture (to detect neurosyphilis) be performed in all symptomatic infants.

The problem then lies with cases of *asymptomatic* congenital syphilis. In terms of the CDC classification, the South African situation is different from that in the USA. Here we have far greater numbers of affected infants, a less well-developed health service and severe financial limitations. Within the local context, the notification and treatment of asymptomatic cases can potentially result in an excessive case load and significant cost. According to the CDC classification, the asymptomatic category includes infants of mothers who have been partially treated or who have been fully treated but whose records are inadequate.<sup>3</sup> Many of these infants are actually uninfected; consequently there is the potential for overreporting and overtreatment. For these reasons four of the units surveyed would not notify asymptomatic cases of congenital syphilis. However, if one considers the goals of notification, then failure to notify these cases will result in an underestimation of the extent of the problem and represents a missed opportunity to follow up these infants and prevent infection in subsequent pregnancies. Notification of all WR-positive *mothers* may indeed be more appropriate but would actually increase the case load substantially.

The *management* of asymptomatic congenital syphilis is equally unclear. Some units do not investigate asymptomatic infants, others use maternal WR titre or adequacy of treatment as a guideline, and the remainder carry out a variety of investigations ranging from neonatal serological tests to lumbar puncture. Treatment varies from a single dose of bicillin to a full course of intravenous penicillin G. It is interesting to note that the four units which would not notify asymptomatic congenital syphilis would nevertheless treat the infants concerned; this indicates that they are indeed considered to be at risk. The majority (5/9) would not follow up asymptomatic cases. Others recommend follow-up, by a medical officer, clinic sister or local authority, for 6 weeks to 6 months.

While we have not established the precise reasons for

the poor notification of congenital syphilis, we do have an idea of the confusion that exists in the case of asymptomatic neonatal disease. There is consensus on the need to notify symptomatic congenital syphilis and on the management of symptomatic cases. The approach to *asymptomatic* cases is unclear. If the goals of notification are to be met, then inclusion of all cases that fulfil the CDC criteria is necessary; however, this may well overburden the health services. As a step towards solving the problem, records need to be kept *and used* so that there is no unnecessary treatment of infants whose mothers have been adequately treated. Expectant mothers must be encouraged to attend antenatal clinics. Collaboration between members of the health team is essential; midwives have an important role to play, particularly in the management of asymptomatic cases. Perhaps interdepartmental differences in the notification and management of the asymptomatic infant will disappear if these goals are met. With regard to one aspect of treatment of the asymptomatic case, there is an indication that, contrary to CDC recommendations, treatment of asymptomatic cases with bicillin alone is considered acceptable and that such cases do not need follow-up;<sup>3</sup> however, this should be properly evaluated in a prospective manner. Results of this survey call into question the need for lumbar punctures in cases of symptomatic congenital syphilis as these do not influence management. Finally, on-site testing is obviously under-utilised and should be encouraged in all institutions, particularly where there is a high incidence of unbooked patients.

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## Towards a future policy for transplantation in South Africa

**T**ransplantation is now universally accepted as the treatment of choice for end-stage organ failure. For patients suffering from corneal blindness or end-stage renal failure, transplantation is the only hope for a cure. In patients with hepatic, cardiac, pulmonary and pancreatic island failure, transplantation could provide a new lease on life.

The current restructuring of the health care system in South Africa is resulting in stringent financial restraints on tertiary care hospitals, necessitating a drastic cutback of services and staff. The future holds no hope of a reprieve. Despite the ever-increasing demand for health care services, priority will have to be given to housing, education and social upliftment.

Clearly the rationalisation of medical services in South Africa is essential and long overdue. Unfortunately, precious financial resources are still being wasted because of bureaucratic inefficiency, and the political legacy of duplicated health care systems. Sadly, even when savings are achieved or income is generated from

private patients, academic hospitals do not benefit, as funds disappear into state coffers.

Transplantation is one of the aspects of tertiary care currently under scrutiny, and risks being severely affected in a future primary care-orientated system. Without doubt, transplantation is an expensive commodity, but it remains a far more cost-effective option than long-term methods of treatment such as haemodialysis. In the USA kidney transplantation costs a total of US\$77 000 per patient by the end of the third post-transplant year. Cost per dialysed patient amounts to US\$35 000 per year, i.e. US\$105 000 after 3 years. The difference in cost after 3 years is \$28 000, rises to \$75 000 by the end of the fifth post-transplant year, and continues to increase each year, clearly demonstrating that kidney transplantation is more cost-effective than ongoing dialysis.<sup>1</sup>

In a Third-World country like Pakistan, an estimated 10 000 new patients with end-stage renal failure require treatment yearly. Because of poor health infrastructure

only 25% of these patients reach a dialysis facility. The cost of dialysis in Pakistan is US\$2 400 per patient per year, whereas renal transplantation costs about US\$4 000 during the first post-transplant year, US\$1 500 in the second year and then levels off to around US\$1 000 yearly. The cost of dialysis, however, continues to rise, due to foreign exchange fluctuations which dictate the price of imported disposables.<sup>2</sup>

In South Africa the cost per patient is estimated at R30 000 per annum for dialysis, versus R10 000 per annum for transplantation, calculated over a 3-year period (Tygerberg Hospital Renal Unit). It clearly makes sense, therefore, to continue with transplantation.

Unfortunately many misconceptions still exist among the general public as well as the medical profession regarding the role of transplantation. One of these is that only privileged members of society are selected to benefit from organs which are donated mostly by the underprivileged. This is simply not true, and although lack of facilities has necessitated stringent admission criteria in some transplant centres, organs are allocated equitably and fairly, based on internationally acceptable scientific methods. In the western Cape the ratio of transplant recipients among different population groups correlates well with the ratio in the general population.

Another common misconception is the transplantation is not very successful. The truth is that advances in medical technology and innovations in immunosuppressive therapy have resulted in a significant overall improvement in life expectancy and quality of life for all transplant recipients. Long-term survival rates now approach 85 - 90%. Remarkable rehabilitation is possible after transplantation, providing patients with an opportunity to return to work, to support their families and take their place in the community again.

Transplantation can no longer be regarded as high-tech or experimental medicine. Renal transplantation has been performed for almost 4 decades and cardiac transplants for more than 25 years — both have stood the test of time. Without access to transplantation facilities, an academic hospital cannot provide adequate training to postgraduate physicians, surgeons, urologists, anaesthetists and cardiologists, not to mention nursing, technical and paramedical staff. Without an active renal transplantation programme, there is no point in maintaining a dialysis programme, and without dialysis facilities, an academic hospital cannot function.

The commonly held perception that expansion of primary care facilities will prevent serious disease and cause tertiary care facilities to become redundant, does not strictly apply in cases of organ failure. Even in highly sophisticated Scandinavian and North American countries, despite adequate care, the number of transplant patients is increasing every year. There are currently almost 20 000 patients waiting for renal transplants in the USA.<sup>3</sup>

Cultural, ethnic and religious objections to organ donation and transplantation in this country are much less prevalent than they are made out to be. A survey by Pike *et al.*<sup>3</sup> showed that more than 70% of people from all population groups (urban and rural) are prepared to donate their organs.<sup>4</sup> The shortage of donor organs does, however, remain one of the major problems facing transplant units all over the world. Less than 20% of all potentially suitable donors (brain-dead individuals on life-support systems) are eventually utilised.<sup>3</sup> Lack of consent for donation is the reason for this wastage in approximately 25% of cases (unpublished data).

Furthermore, many organs are not utilised because of medicolegal requirements, signs of infection or other

unpreventable problems. However, a large number ( $\pm 25\%$ ) of potential donors are never recognised as such, or simply not referred to transplant centres because of apathy among medical personnel. More than 1 000 patients in South Africa are on waiting lists for organ transplants at any given time, and many more are in need of corneas.

The transplant fraternity can do much more to improve donor utilisation in this country, by ensuring that organs (especially hearts and livers) which are not used locally, are offered to centres where these organs can be transplanted. Donor organs are a national resource and ideally a system should exist where equitable distribution of organs based on human leucocyte antigen matching, can be co-ordinated by an independent national body. Unfortunately geographical and financial constraints have prevented this from becoming a reality.

Legislation regarding organ donation is suboptimal, especially in cases where the name of the donor is not known or when the relatives cannot be located. Furthermore, a critical shortage of corneas for transplantation exists since a moratorium was placed on the removal of corneas in mortuaries.

Fortunately, through the effects of the Organ Donor Foundation, the proposed card-format driver's licence will include an area where willingness to be an organ donor can be indicated. This may improve public awareness and partly alleviate the shortage of donor organs.

The role of transplantation in the private sector is rather controversial and it is feared that many private patients will eventually become a burden to the state when medical aid funds run dry. The possibility that a financial motive may influence patient selection and organ allocation cannot be ruled out. Transplantations in private hospitals could, however, alleviate the patient load at state institutions, and be a viable option if sensibly planned in co-operation with local academic units.

Representation to the Minister of Health and other health policy-makers must be made, in order to obtain a commitment to maintain state funding of transplantation.

The proposed implementation of 'framework autonomy' in academic hospitals is unlikely initially to provide adequate funds to sustain a transplant programme. National funding, perhaps on a supra-regional basis, such as is seen in the British health care system, is essential to ensure a future for transplantation in South Africa.

The alternative would not only be to the detriment of the thousands of patients waiting for transplants, but would also lead to a disastrous deterioration in standards of medical care, and a further loss of professional expertise.

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