Haemodialysis in India

Sir,

Management of end stage renal disease (ESRD) varies in different parts of the world. The overriding factor is the economic status of the community which is served by the medical facility. Communities where state financing exists, or insurance privileges are available, ESRD management is often uniform: whereas in communities where there is no existent state support for the treatment of ESRD, the frequency with which one modality is offered is often determined by the individuals paying capacity. Hence, often a heterogeneous picture emerges from a country like India as is borne out by our data, which is different from that of CMC Vellore [1].

Our centre has been routinely offering maintenance haemodialysis (MHD) since its inception (7 years ago) and we have patients who have been on dialysis for more than 6 years. We offer bicarbonate dialysis to all patients. Cellulose acetate (approximately 65%) and polysulphone (approximately 35%) membrane dialysers are used. A large percentage of our patients (40.5%) are on erythropoetin. A larger number (30% in 1998) of patients were on MHD as compared to that of patients receiving an allograft (13.5% in 1998) in our group.

To look into our MHD cohort, a medical audit was performed for 61 incident and prevalent patients who were on MHD for more than 3 months during the period between 1 April 1997 and 31 March 1998. Of the 61 patients 39 were on twice weekly dialysis and 22 thrice weekly. The mean (SD) age of this cohort was 54.6 (±12.2) years which is higher that what is reported for Indian patients in the literature [2]. The number of diabetics (29 out of 61) on MHD was again higher than reported in earlier studies [1,3]. In fact the demographics of our data was similar to that reported from western ESRD data systems [4]. Despite a large number of patients on twice weekly dialysis, most of the patients seem to do well with 47 out of the 61 patients having a serum albumin more than 3.5 g/dl and also there was no difference in the serum albumin of patients who were dialysed twice (3.9±0.6 g/dl) and those who were dialysed thrice (3.9±0.6 g/dl). KT/V (calculated by single pool variable volume as described by Daugirdas JT) [5] was done for 37 patients and the mean (±SD) of this measurement was 1.0 (±0.3). A lower dialysis dose also was not correlated with serum albumin in our study. This reflects a similar observation made from another Indian study which contends that Indians in general require less dialysis [6]. Eight patients died during the study period (mortality of 12.9%) which is considerably lower than what is reported from CMC Vellore [1], but compares favourably with the USRDS, 1998 [4].

The patients who expired were in general as a cohort older (61.6±10.2 years), had more comorbidity and had lower serum albumin (3.2±0.5 g/dl).

The approximate 1-yearly cost of treatment for MHD works out to be $2512 (twice weekly) to $3628 (twice weekly). Transplantation costs in our centre (which is one of the lowest in the country) works out to approximately $7000 (inclusive of immunosuppressive medications of 1 year). Despite the higher first year cost of transplantation, many centres offer transplantation as the first choice of renal replacement not only because of medical reasons but also because of a large percentage of out of town referral which utilize the services of these centres [1]. We, being situated in a large metropolis have a large local referral and hence it is easier for us to provide MHD facilities to ESRD patients.

Our data of MHD patients highlights the fact that MHD is a viable modality of renal replacement in India in select centres and should be offered to patients in whom transplantation is not a possible alternative.

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