Peritoneal dialysis as the initial modality of RRT in developing countries

The number of patients with end stage renal disease is increasing around the world mainly because of the increase in incidence of diabetes mellitus. Although 80% of the world's population lives in developing countries, the number of patients on dialysis in developing countries is only 20% of the total number of dialysis patients around the world. Financial constraints is the most important reason for the low number of patients on dialysis. However the other reasons for fewer patients being on maintenance dialysis is the lack of access to hemodialysis. Hemodialysis requires investment in equipment and trained manpower which is expensive & is big task for any government who are already bogged down with management of communicable diseases and malnutrition. Peritoneal dialysis in such situations is the ideal form of dialysis which can help provide dialysis to the vast majority of end stage renal disease patients who require renal replacement therapy. Continuous ambulatory peritoneal dialysis although cumbersome for the family can be performed at home and with good training can provide adequate removal of uremic toxins. CAPD does not require any expensive equipment, electricity supply or infrastructure in the form of space as is required in hemodialysis. It also does not require the patient to travel long distances to HD centres involving additional expenditure to the patient. CAPD was started in India in 1990 but the growth of PD in India has been less than satisfactory. There is a reluctance on part of patients to accept PD because of the “fear” of doing unsupervised treatment & also the “supposed high incidence of infections”. Unavailability of good diagnostic facilities also adds to the problems of home treatment. Physician reimbursement is another reason why many nephrologists are partial towards HD as the only modality of renal replacement therapy to most patients. CAPD is essentially reserved for patients who have problems with HD or have run out of vascular access essential for HD. Our centre is tertiary care teaching institution funded by the government and having full time nephrologists on the rolls. CAPD was started at this centre in 1993 and today it is the largest CAPD centre in India and South Asia. At present 230 patients are on follow up and 1700 patients have been initiated on PD. The 2 year & 5 year patient survival both in diabetic and non diabetic patients is similar to as what has been reported in literature. The 10 year actuarial survival is inferior to other centres. Peritonitis rates are well within levels as recommended by the Internal guidelines. The incidence of fungal peritonitis is much higher as compared to the incidence reported from the West. However the patients who have chosen CAPD are generally happy and satisfied with the treatment. In view of our experience we believe that PD is the best option for starting RRT in developing countries who do not have adequate facilities for accepting all ESRD patients on HD. In our presentation we will discuss the medical & financial benefits of PD over HD for initiating dialysis in ESRD patients in developing countries.

Biography

Amit Gupta is currently working as a Professor of Nephrology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India. He is a Senior Resident in AIIMS New Delhi, India and fellow in Nephrology Guys Hospital, London, UK and Toronto Hospital, Toronto, Canada. He had qualifications of MBBS, MD (Medicine), DNB (Nephrology) and FRCP (London). He has 40 years of experience as a Faculty Member in Department of Nephrology, SGPGIMS, Lucknow, India joined in the year 1987. His main research and interest areas are Peritoneal Dialysis and Renal Transplantation. He held various positions in various societies, such as Past President of Indian Society of Nephrology, 2009 and Past President Peritoneal Dialysis Society of India, 2004. And also he had orations in Khulfar Oration of Indian Society of Nephrology 2005, Arogya Kalyan Nyas Oration of Peritoneal Dialysis Society of Nephrology 2012 and Georgi Abraham Oration of Peritoneal Dialysis Society of India 2016. He had 192 articles in indexed journals & 30 book chapters. And also he had an achievement in the CAPD program at SGPGIMS in 1993 which is the largest centre for CAPD in South Asia.