

WRITEUP – DEPARTMENT OF NEPHROLOGY

Department of Nephrology & Renal Transplantation was started in 1987. This is one of the most active & busy department at this institute & is one of the biggest nephrology department in India. Department is an established regional referral center in nephrology for patient care, clinical activities, training & research. Recognized by MCI for DM (Nephrology) training. Department also houses the editorial office for Indian Journal of Transplantation, & Secretariat for Indian Society of Nephrology. Department of Nephrology and Renal Transplantation, SGPGI, has been instrumental in establishing the speciality of Nephrology as tertiary care services for management of Chronic kidney disease including renal replacement therapy i.e. Dialysis, Kidney Transplantation for the whole state of UP and surrounding states like Madhya Pradesh, Nepal, Assam, Bihar and other north eastern state.

Courses: Department runs a 3-year MCI recognized training programs, which leads to DM (Nephrology) degree. During the training period residents are trained extensively in clinical nephrology, hemodialysis, peritoneal dialysis, CRRT, renal transplantation & all types of emergencies related to kidney disease. Three candidates are selected each year through all India entrance examination. Post Doctoral Fellowship - One seat (PDF) in renal transplantation medicine. Department is also in process of starting postdoctoral certificate course (PDCC) in Pediatric Nephrology. Till now 35 DM students have passed out and settled in various centers in India and outside (USA & Canada) as faculty members and in corporate sector.

Clinical Services Areas: 70 beds inpatients nephrology ward with almost 100% bed occupancy. Patients (both children and adults) suffering from acute or chronic renal failure, hypertension, and systemic diseases involving kidneys are managed. Ultrasound guided kidney biopsy and creation of vascular access like central venous cannulation, arteriovenous fistula and shunts are done by nephrologist. Kidney transplant unit works in collaboration with department of urology. About 120- 130 live related & cadaveric renal transplantations are done each year. Pre transplant prospective donor evaluation and work up, pre and post transplant work up and follow up of renal transplant recipient is done by nephrology department. Presently we have about 1500 renal transplant recipients in our long term follow up. Continuous Renal Replacement Therapy (CRRT) programme for critically sick patients (2). CRRT is provided by 2 CRRT machines and 15-20 sessions are performed per month. One of the largest CRRT units at national level. Consultation from other departments & Emergency calls. Plasmapheresis is done in Hemodialysis Unit and 10-15 sessions are performed per month. Renal lab for renal chemistry, hematology, urinary investigation, cyclosporine levels etc. We also evaluate patients who come to us for second opinion for their kidney disease.

The Continuous Ambulatory Peritoneal Dialysis (CAPD) established at SGPGI since 1993 to continue. CAPD programme running at SGPGI is largest scale in South East Asia. The 1345 patients initiated for the CAPD at SGPGI. The patients are monitoring and evaluating by the consultants in OPD basis (Wednesday and Saturday).

The Hemodialysis Unit at SGPGIMS has expanded with cutting edge facilities for water purification SLED and CRRT. There are 25 Hemodialysis Machines and 4 ventilators in the Dialysis Unit. Hemodialysis unit runs round the clock in three shifts & about 1500dialysis/month are done. Acute peritoneal dialysis units (6 beds): Fifty sessions are done per month Continuous ambulatory peritoneal dialysis programme is one of the biggest programme in Asia.

The department has also started one year certificate course for training nurses in dialysis (PNCC in Dialysis). All members unanimously recommended the teaching and training programmes in Dialysis for para medics (nurses and technicians).

The kidney transplantation facility at SGPGIMS started with cadaver transplantation (donor being brain death) in 1987 and has been doing on an average 120 kidney transplants per year. Till now 1714 kidney transplants have been done. The original kidney transplant unit (KTU) had 8 beds. The renovated upgraded KTU has 13 beds for post transplant care and with facilities for intensive care, vital monitoring. The unit would also have facility to give immediate post transplant dialysis with ultrapure water if needed. At present on an average 4 kidney transplants are done per week. There is a waiting list of about 100 patients who are maintenance on hemodialysis awaiting kidney transplantation. The average waiting period before kidney transplant is 3 months. The upgraded kidney transplant unit would cut down the waiting period and also improve the intensive care in the immediate post transplant period. This would be big relief for the patients with end stage kidney failure waiting for kidney transplant, who come from far away places and also reduce the expenditure on stay and dialysis while waiting for kidney transplantation.

Department of Nephrology is also going to start research and training programme for M.Sc. Renal Nutrition and PhD programme in renal nutrition. The Board reviewed the Renal Nutrition area and recommends that the department has done excellent work in this area. There is need to develop renal nutrition services from national perspective to augment clinical care, develop infrastructure, impart training and do research (PhD programme) and have dedicated renal dietician and a faculty dedicated for developing the renal nutrition service. Board of Studies approved the plan for developing renal nutrition with a dedicated renal dietician, faculty member and infrastructure. The board of study approved the plan to have a dedicated renal nutrition unit.

Departments of Nephrology, Urology and Renal Transplantation have been instrumental in establishing comprehensive tertiary care services for management of Chronic kidney disease including renal replacement therapy for the wholes state of UP and surrounding states like Madhya Pradesh, Nepal, Assam, Bihar, West Bengal and other North eastern states.