

Healing Touch

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Curing with compassion

MANJULABEN MEHTA KIDNEY HOSPITAL

Yet another dream-come-true

A large chunk of the society today, inclusive of patients of all age groups, suffers from some form of chronic kidney disease or the other. The patients are yet to receive proper renal treatment. The continued and growing need for renal services has been acutely felt in this part of the country. This city too has been complaining of having so far been deprived of the facilities of quality renal care, due mainly to the lack of vision, zeal and infrastructure required for offering such expensive and specialised services.

Dr. Devi Shetty, Chairman, Asia Heart Foundation, and Dr. Alok Roy, Vice Chairman, AHF, recognised the acute need felt by Kolkata for quality care in this sector.

Hence they contacted diamond merchant Sree J. Jayantibhai Mehta, a humble, very down-to-earth gentleman, and the oldest member of the Gujrati community settled in Kolkata. Throughout his life, he has been a social activist and is currently concentrating on social causes. Shree Jayanti Bhai Mehta hails from Palanpur and his family has been settled in Kolkata for more than 100 years. His father started the diamond business in 1912, a venture that has grown at a dynamic pace. He is an 88-year-old gentleman with a very soft heart who is always ready to help the needy. Shree Jayanti Bhai Mehta has dedicated the dialysis unit of the hospital to his wife, Smt Manjulaben Mehta.

Shree Sevanti Bhai Shah hails from Bhuj, Kutch and his family is settled in Kolkata for nearly 100 years. He is one of the oldest and seniormost members of the Calcutta Stock Exchange. A thorough gentleman, he maintains a very low profile, though he is associated with a large number of social and charitable institutions. He is probably the only non-controversial arbitrator whose fatherly advice is accepted by every one in the Gujrati and Marwari Community and all institutions run by them in Kolkata. His support and impartial advice is today the main source of inspiration for all the institutions with which he is associated.

Shree Babu Bhai Verma hails from Kutch, Anjar. A coal mines owner and today at the age of 75, a very active personality who is occupied in the real estate and trading activities. Born and brought up in Dhanbad, Shree Verma is a very pleasant personality with good intellectual knowledge. Currently settled in Kolkata, his interest is focused on humanitarian causes a very low-profile, silent but strong philanthropist.



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Treatment of glomerular disease



Dr. Dilip Kumar Pahari
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Future of Nephrology:

It is our common knowledge that once kidney disease starts, the disease often progresses gradually to end-stage renal failure requiring dialysis and transplantations. When glomerular filtration rate (GFR the best indication of renal function) falls permanently below 30-35 ml/min. corresponding to serum creatinine 1.5-2mg%, the disease progresses quickly thereafter. At this level of kidney function, most patients are stable and if we can arrest the progression of the disease at that stage, a large number of dialysis and transplantations can be avoided. Unfortunately, beyond tight control of diabetes (in diabetics) and blood pressure with ACEI/ARB, we have not achieved anything further. Treatment of glomerular disease is unsatisfactory at best. In most cases, glomerular disease progresses to end-stage disease in spite of current therapy. Introduction of cyclosporine/tacrolimus, sirolimus and other anti-cytokine molecules may help to achieve remission in several groups of patients in the near future.

Further emphasis is being given to treat kidney disease early, when GFR is normal or mildly decreased with normal blood urea/creatinine. It is being emphasised to obtain GFR values of each patient either from urinary and blood measurement or calculated from serum creatinine (MDRD/C & G formulae). Kidney disease treatment when GFR is normal (Stage I CKD) or mildly decreased (GFR 60-90 ml/min) is much more effective in preventing progression of kidney disease.



Measurement of microalbumin in urine (i.e. microalbumin/creatinine ratio) is a sensitive indicator of the glomerular injury. Therapeutic intervention at this stage may go a long way in preventing further kidney injury. Measurement of blood PSA in each male patient above age 50 is routinely performed in certain countries. This primary screening has helped to detect prostatic cancer in early stages with improved therapy.

In an asymptomatic patient, it is desirable to know his/her kidney function, and one should measure GFR, urinary microalbumin: creatinine ratio, urine analysis, and abdominal sonography of the urinary system.

Once kidney disease is known, often renal biopsy is required for accurate diagnosis. Only light microscopy and immunofluorescent microscopy is available in the city.

Electron microscopy to examine the biopsy specimen is urgently required in Kolkata. Examination of the urine specimen under phase-contrast microscope and with polarised light is a routine practice in developed countries and should be available in our hospital as well.

Various cytokine molecules like erythropoietin, PTH receptor analogues, various immunosuppressants like mycophenolate, cyclosporine, sirolimus, tarolimus, anti CD25 and other molecules holds promise for better treatment of kidney disease. We have to use these molecules in a scientific way for better care of the patient and control the disease process.

Future of Dialysis:

Once a patient reaches end-stage renal disease with GFR > 15ml/min or stage V CKD, some form of dialysis is initiated. Presently, we offer two forms of dialysis. Peritoneal dialysis - which can be practised at home and may be performed manually or with the help of cyclers (APD/CCPD/NIPD etc). At present we have all the facilities for peritoneal dialysis. Cycler-assisted peritoneal dialysis is being performed by coordinators of the different pharmaceutical companies. Our in-house training for peritoneal dialysis including cyclers needs to be done for better co-ordination among patients.

Once haemodialysis is started in any patient, it should be done 3 times a week with adequate dose (KT/V > 1.2) of each HD. While we are targeting to achieve adequate dose of each dialysis with highest standards, most patients are not willing to get dialysis thrice a week primarily because of financial reasons. While 3 times a week is the current world standard, some centres are doing daily night dialysis for 8 hrs per night, with excellent outcomes. It seems that daily night dialysis will be the bench mark for future, and our aim should be to catch up with the trend of modern therapy.

Renal solutions for all



Dr. Deepak S. Ray
MD, DM (AIIMS)

Renal (kidney) diseases create complex problems. Besides the physical effect on the patient (morbidity and mortality), these diseases also have a great socio-economic impact. The diseases of kidney are on the rise because of various reasons like increased incidence of diabetes mellitus, hypertension, and misuse or abuse of drugs (both allopathic and of alternative medicines). Besides the sufferings it brings, its burden on resources is also enormous.

The therapy for renal diseases has developed over the years. With modern medicine, it is possible to achieve a near-normal life (both qualitatively and quantitatively), if proper medical attention and therapy are provided. Besides alleviating sufferings, present-day renal treatment can send the father back to the workplace, and children back to school. The problems with renal treatment are mostly two. One, its availability in all places and two, cost of treatment. Kolkata unfortunately, did not have adequate facilities for comprehensive renal therapy.

Keeping the above-mentioned hurdles in mind, the renal sciences department was started at our hospital. The target we fixed for us was lofty, to provide the best quality renal treatment under one roof at an affordable price, so that the people of Kolkata and also of nearby states would not have to travel abroad, or to other cities for kidney treatment. We built the largest dialysis unit of the country with state-of-the-art machinery. The 20 machines installed not only provide quality dialysis but also provide urea clearance reports (kt/v) after each dialysis. Water that is to be used for dialysis has to be of superior quality. Hence, besides having good reverse osmosis systems, ultraviolet rays, we also possess excellent engineering support to provide quality water for dialysis. We are the only centre in the city, which proudly possesses equipment for cleaning and rinsing of artificial kidneys after dialysis. Besides having efficient dialysis technicians and nurses, the unit has highly qualified (trained both in India and abroad), experienced and eminent nephrologists, Dr. Dilip Kr. Pahari and Dr. Deepak S. Ray, who have full-time commitment with the hospital. Dialysis is only a part of renal treatment. We do provide everyday out-patient services, inpatient services, intensive therapy care, Continuous Ambulatory Peritoneal Dialysis, kidney biopsies, acute renal care and all kidney-related investigation

supports. We are also one of the few hospitals, which provide CRRT (Continuous Renal Replacement Therapy) for very sick patients. For CRRT, we have a modern four-pump equipment set-up. Since we are aware that the financial impact of renal treatment is very high, the prices of treatment have been kept low, so that the facilities can be availed by the common man.

We are now in the process of starting Renal Transplantation in our centre. Very shortly, we shall provide kidney transplantation service at an affordable cost.

In spite of keeping the cost low, the quality of services offered here is comparable to that of the best of the hospitals in the western countries. Little doubt that this is the reason that within five months of commencement of the department, we have been able to do the maximum (1,200 per month) number of dialysis as compared to any other hospital in the entire city.



Since our benchmark is high, we keep ourselves updating regularly in the form of staff training, regular seminars, journal clubs, researches and by actively participating in international and national scientific conferences. We know we have made an impact in the field of Nephrology. But we also know that we have miles to go to achieve our ultimate goal. We are determined, no matter how difficult the path.

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Dialysis Unit: The journey begins in earnest

Shree Mukesh Bhai Bhansali, hails from Palanpur and his forefather settled in Kolkata nearly a 100 years ago. His grandfather started the tea business in Kolkata, which flourished under the able leadership of his late father Shree Gunvantlal Bhai Bhansali. Young and energetic Mukesh Bhai, with his farsightedness, advanced his business at a great pace. At present, he is engaged in diversified business activities in the field of engineering & IT. He is also associated with various philanthropical work mainly in medical and educational fields, apart from taking care of old and underprivileged persons.

They shared the dreams of Dr. Shetty and Dr. Roy and extended their support with large normal and monetary contributions. Thereby started the journey.....



The Manjulaben Mehta Kidney Hospital came into existence, which, with its most technically-advanced equipment and machinery, has the capacity to dialyse 20 patients at once time. It is the largest Dialysing Unit in the whole of India. The ultimate goal of the project is not to be limited to being the largest dialysis centre, but to grow into a 500-bedded kidney hospital.

Availability of the best technology, environment, infrastructure, latest machinery, together with a team of highly qualified doctors, experienced technical staff and nurses, and other dedicated supporting crew shall make this hospital state-of-the-art in every way imaginable, right down to its ambience.

It will be a dream-come-true, offering a more holistic approach to quality patient care at affordable expenses so as to cater to the needs of the common man.

Focus on cadaveric and related transplants

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Future of kidney transplantation:

Kidney transplantation is being done in India is mostly live related transplantation. Only a select few centres in India perform cadaveric renal transplantation on a regular basis, even though their number is still very very low.

We plan to start both live related and cadaveric kidney transplantation on a regular basis, so that majority of the patients can get benefit from it. The issue of live unrelated transplantation is a delicate one, and many centres have fallen into trouble with unrelated transplantation. In some countries, there is a debate to start unrelated transplantation while rewarding the donor.



Legal provisions need to be cleared before we perform unrelated transplantation. Our main emphasis will be on encouraging cadaveric and related transplants and improve their outcomes.

Setting of various laboratories is urgently necessary to facilitate transplantation. HLA should be done by PCR or pyrosequencing and cross match by flow-cytometry. Detection of drug levels (tacrolimus, sirolimus, etc) and other viral serology needs to be started in-house for adequate growth of transplantations. Lot of things need to be done to standardise kidney transplantation - including basic and clinical research for better outcome.

Dear Readers

In this special issue dedicated to the Manjulaben Mehta Kidney Hospital, Healing Touch takes you through a facility that has been the hospital's dream since inception. This soon-to-be-opened unit promises to offer therapies for all renal conditions at extremely affordable rates, in synch with our core philosophy of reaching out. **Editor**