Dear All,

Welcome back to those who attended the Asian Chapter Meeting in Beijing this October. The program was terrific and well received by the participants.

In this issue, we are delighted to have Dr. K.S. Nayak from India to discuss his experience promoting PD in India. You are most welcome to distribute this newsletter electronically or in printed form to your colleagues or other people interested. If you or your colleagues would like to receive this newsletter directly from our editorial office, please send your e-mail address to: administration@multi-med.com

Sincerely,

Dr. Cheuk-Chun Szeto
Editor, Asian Chapter Newsletter
International Society for Peritoneal Dialysis
c/o Department of Medicine & Therapeutics
The Chinese University of Hong Kong
Prince of Wales Hospital
Literature Update on Peritoneal Dialysis – May to August 2009

**CAPD versus automated PD**

Two recent studies that compared the survival of patients treated with CAPD and automated PD (APD) are thought-provoking. In the first study, analyses were carried out using data from the United States Renal Data System on 66,381 incident patients on chronic PD from 1996 to 2004. Adjusted for demographic, clinical, laboratory and dialysis facility characteristics, the risks for death and technique failure were substantially reduced when patients in the 2002-2004 period were compared with those from the 1996-1998 period. Most importantly, the risk improvements for CAPD and automated PD were similar. Under intent-to-treat, time-dependent, and as-treated analysis, there was no difference in risk for death or in technique failure between the two modalities.

In the second study, 87 APD and 562 CAPD patients were selected at 3 months after start of dialysis from a prospective multicenter cohort study in incident dialysis patients (NECOSAD). Both intention-to-treat and as-treated analyses found no difference in the overall mortality and technique failure for APD compared with CAPD in incident dialysis patients.


**Comment:** These two studies, one from the USA and the other from Europe, one retrospective and the other prospective, carry essentially the same message: the choice of PD modality should depend on practicability and patient preference.

**Peritoneal transport: What’s new?**

Two recent studies on clinical peritoneal transport cast doubt on some of our long-standing beliefs. First, it is often recommended that peritoneal equilibration test (PET) should be performed when a patient is euvolemic because fluid overload would affect the result of PET. Two investigators reviewed data from 211 consecutive patients who had a standard PET and a simultaneous multifrequency bioimpedance test to determine the fluid status. PET ultrafiltration volume, surprisingly, was actually not affected by extracellular fluid volume overload or hyperglycemia.

It is also commonly believed that peritoneal transport of small solute is related to survival of PD patients. In a retrospective study, 192 incident PD patients were evaluated for the ability of peritoneal protein clearance. In addition to dialysate-to-plasma creatinine ratio, peritoneal protein clearance positively correlated with age, presence of peripheral vascular disease, and urine volume, while it correlated negatively with serum albumin. On multivariate analysis, independent predictors of
Invited Article

Promoting PD in India

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Current Status of PD in India

In India, Peritoneal Dialysis was initiated in the early 1990s by a handful of ‘PD enthusiasts’ who were unsure whether the therapy would gain ground due to wide-spread skepticism due to issues of cost, prevalent perception of a poor sense of hygiene, and lack of medical personnel with ‘hands-on’ PD training. From about 4-5 centers in the 90s, the country now has in excess of 300 PD centers recruiting patients on a regular basis.

There are presently about 7,000 patients on Chronic PD in India, in comparison to about 35,000 on Chronic Hemodialysis, with a PD penetration rate of 18%. Most of these patients are concentrated in the Southern and Northern parts of the country with the West preferring Hemodialysis due to highly subsidized costs for this modality of treatment and the East lacking good medical infrastructure. Approximately less than 200 patients are on APD (2.8%). Diabetic Nephropathy is the most common cause of ESRD in patients initiating PD (about 35%) in most centers with ‘High-Average’ transporters being the predominant membrane characteristic on PET unlike in neighboring China where ‘Low-Average’ transporters are in the majority. This may have an impact on PD ‘technique survival’, cardiac co-morbidity and adequacy leading to higher ‘drop-out’ rates in Indian patients. The drop-out rate is also probably partly contributable to malnutrition in our patients due to factors such as the need to limit salt and fluid intake, higher protein losses in the PD effluent, and further compounded by the strict vegetarianism in various forms practiced by the Hindus and Jain communities. PD drop-out is the major ‘bottle neck’ for the growth of PD numbers apart from poor PD penetration rate.

What is being done?

Currently the onus is on the health care professionals to ‘educate’ the government agencies that PD is the better option for Renal Replacement Therapy for many considerations, not the least of which being lower cost per patient. This was not the case a decade back when PD cost approximately twice as much as Hemodialysis due to PD fluids being available only by import. Presently, local manufacturing by three companies has brought down the cost of a 2-Liter PD bag to less than $4.50 USD bringing the monthly cost of 3 exchanges of PD to less than $400.00 USD per month and putting it on par or even slightly less than Hemodialysis. The cost of ‘generic’ erythropoietin (EPO) is also reasonable: 4000 units costing about $15.00 USD with most patients managing with $60.00 USD per month for EPO.

“A ‘PD First’ policy is ideal for the Indian ESRD patient both as a ‘Bridge to Renal Transplant’ and as the initial Renal Replacement Therapy.”

PD in India has grown since the last decade, facilitated by the educational initiatives by the nephrology community in setting up the Peritoneal Dialysis Society of India (PDSI) in 1997 with Annual meetings, publishing a dedicated journal for PD, and the hosting of the 2nd ACM-ISPD Meeting in Hyderabad.
in 2005. The Delhi High Court has also recently ordered the
government to treat HD and PD on an equal basis.

In addition, at our Center at Global Hospital, we are aggres-
sively introducing the internet and mobile telephones as a way
to get the patient and the PD unit in close liaison, which should
result in better management of patient PD complications, espe-
cially peritonitis and exit site infections.

What still needs to be done?

In India, compulsory training in PD during the Nephrology
Fellowships, and inclusion of questions on PD in the theory and
practical examinations of the National Board of Examinations
(NBE) in Nephrology (DNB) should be enforced. It is unlikely
that Nephrologists will practice PD unless there is a firm foun-
dation of skills and techniques created in them.

To address the high PD drop-out in improving patient out-
comes and numbers, ‘Centers of Excellence’ have to be developed
in each region of the country which can train nurses and doctors
in all aspects of holistic care of the PD patient and equip them to
initiate good sized, quality PD programs in their ‘home’ settings.
PD programs that have at least 25 patients under follow-up fare
much better than smaller ones in achieving good patient outcomes.

Establishment of a PD Registry will improve outcomes,
as has been the experience in other countries. The process in
this direction has been initiated and needs support from all PD
practitioners.

Higher usage of biocompatible solutions and the PD Cy-
cler will also bring more patients into the ambit of PD.

Finally, and most importantly, a ‘PD First’ policy is ideal-
for the Indian ESRD patient both as a ‘Bridge to Renal
Transplant’ and as the initial Renal Replacement Therapy.
This will bring down the cost of PD fluid further due to the
dynamics of large scale commodity manufacturing and in-
creased PD penetration rate. This will also open up neighbor-
boring regions as export markets for less expensive PD flu-
ids from India, as is already happening in Thailand.

The Hong Kong experience, and more recently the ongo-
thailand success story, should inspire India to emulate
these examples of successful ‘PD First’ initiatives. A mar-
ginal increase in PD penetration rate to about 35% and a
reasonable reduction in PD drop-outs can spur the PD num-
bers easily above 20,000 patients in the next couple of years
in India. This growth, along with that of China, will help to
bring the Global PD scenario out of ‘recession’!

Breaking News

Successful Applicants for Asian Chapter Scholarship

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<tr>
<td>Men Sam Oul</td>
<td>Dr.</td>
<td>Cambodia</td>
<td>KS Nayak</td>
<td>Global Hospital, Hyderabad, India</td>
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<tr>
<td>Oeun Chanthy</td>
<td>Nurse</td>
<td>Cambodia</td>
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<td>Ashwinikumar Aiyangar</td>
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<td>Yun Li</td>
<td>Dr.</td>
<td>China</td>
<td>R Dwarakanathan</td>
<td>Royal Brisbane &amp; Women’s Hospital, Australia</td>
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<td>Konnur Abhijit Madhav</td>
<td>Dr.</td>
<td>India</td>
<td>A Gupta</td>
<td>Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, India</td>
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5th Asian Chapter Meeting Announced

The 5th Asian Chapter Meeting
October 6-8, 2011
Dusit Resort, Pattaya, Thailand

13th ISPD Congress Abstract Deadline Extended

Abstract submission deadline extended to March 16th!