



ISPD Asian Chapter Newsletter

International Society for Peritoneal Dialysis (ISPD)

www.ISPD.org

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Message from the ISPD President



It is a pleasure to write this letter as part of the inaugural issue of the ISPD Asian Chapter newsletter. This chapter of ISPD was founded at the urging of Dr. Wai-Kei Lo and the idea was embraced by the ISPD Council several years ago. This was followed by the enormous success of the first ISPD Asian Chapter Meeting held in Hong Kong in December 2002. The Chapter now looks forward to hosting the ISPD Congress in 2006. I am sure that it, too, will be a great success.

The objective of creating the Asian Chapter of ISPD is to try and bring the activities of ISPD closer to the various regions by having events and services that respond to regional needs that might not be met by the international organization. The recent meeting in Hong Kong and this newsletter bring substance to that objective. We hope that the membership in Asia will be active in making suggestions to ISPD in developing programs that are needed in the area. We welcome your feedback.

I urge you all to visit the ISPD Web site at www.ISPD.org. There, you will find all relevant information about membership, our journal and upcoming meetings. My congratulations to the founders of this ISPD Asian Chapter and my very best wishes for success.

Prof. Sarah Prichard

President, International Society for Peritoneal Dialysis

The ISPD Asian Chapter

The objectives of the Chapter are:

- Promotion of proper practice in PD
- Addressing problems relating to development of PD in Asia
- Education and training
- Liaison and friendship building among Asian nephrologists and renal nurses

A core group of nephrologists from various Asian countries is helping the Chapter. You may liaise with core members from your country to give your opinion and ideas to the Asian Chapter (please contact the editorial office for information, if needed).

The ISPD Asian newsletter will be published twice a year, in March and September, primarily in electronic format.

An Asian Chapter Meeting will be held every 2 to 3 years. The forthcoming meeting will be held in Hyderabad, India, on 21-23 January, 2005.

Joining the ISPD

To show our strength and to get the most updated information and communications in the field of PD, join the ISPD! Members are entitled to receive the "Peritoneal Dialysis International" and to join various PD meetings – ISPD Congresses, Asian Chapter Meetings, Dialysis Conferences and many more – at a special rate.

If you are from the developing countries and find the membership fee unaffordable, there is a category called "Institutional Membership" that allows 10 members from the same institute to join at the cost of a single member.

Please go to the ISPD Web site www.ISPD.org for details. Don't hesitate, join us today!

To our industry partners:

The editorial office welcomes your assistance in distributing this newsletter in electronic or printed form to the dialysis community. If you are interested in sending scientific messages through the newsletter, please contact the editor at: fkli@hku.hk



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Messages from Your Representatives in ISPD – Coordinators of the Asian Chapter



When I was a resident in the early 1980's, I witnessed the efforts of my consultant in developing CAPD to help those who were not able to enter the hemodialysis program, and to wrestle with the problem of peritonitis. Twenty years down the track, we can now enjoy the fruits of all the good work of our PD pioneers.

We may also accolade the beauty of PD – no space limitation for patient acceptance, greater patient freedom, higher survival rates, better electrolyte control and, in many countries, cost saving when compared with hemodialysis.

In Hong Kong, the PD penetration rate has grown to over 80% in public hospitals. In other parts of Asia, though the rate still varies between 5 and 30%, the PD population is growing rapidly, particularly in India and China.

There have been lots of advances in PD therapy over the past 20 years; e.g. reduced peritonitis rate with the twin-bag system, more biocompatible solutions like amino acids or icodextrin, and low glucose degradation products or neutral pH solutions are available to cater for different patient needs. Cost is still a major concern to many Asian countries. But, the more patients on PD, the more likely the cost will go down.

With the support of the whole ISPD Council, I hope I can work together with you to develop PD in Asia and to provide better care to our ESRF patients.

Dr. Wai-Kei Lo

*Tung Wah Hospital
Hong Kong*



Since CAPD was introduced to Japan more than 20 years ago, the number of PD patients increased to 8,569 by the end of 2002. CAPD is a wonderful treatment that has greatly helped patients to return to a normal life. But the long period of CAPD treatment in Japan has uncovered an increasing number of unexpected complications, such as encapsulating peritoneal sclerosis (EPS).

During the past 5 years, a lot of studies were conducted to prevent and treat EPS. I believe this information, which we can share, will benefit future CAPD treatment in other countries.

It is very interesting and important that recent data show that PD can prolong residual renal function. As we always target at a better treatment for renal failure, I believe that some clues may exist in CAPD treatment that would help us to construct a new strategy to overcome the progression of chronic renal injury. This should be further studied in relation to diet modification, for example, in vegetarians, who could be easily enrolled in Asian countries.

In Japan, more than 30,000 patients enter maintenance dialysis annually, resulting in an explosive increase in numbers of dialysis patients. This places a heavy burden on the medical insurance system as well as the social system. Every country with an increasing number of ESRF patients will inevitably face the same issue.

I hope that PD can contribute not only to the treatment of ESRF, but also to the preservation of residual renal function and broadening of patients' social activities. This would be a very important breakthrough for the future of patient care in Asian countries.

Prof. Masaaki Nakayama

*Tokyo Jikei University School of Medicine
Tokyo, Japan*

Research Update in PD:

publications from January to June 2003



Dr. Cheuk-Chun Szeto

The Chinese University of Hong Kong, Prince of Wales Hospital, Hong Kong

Epithelial-mesenchymal transition of peritoneal mesothelial cells

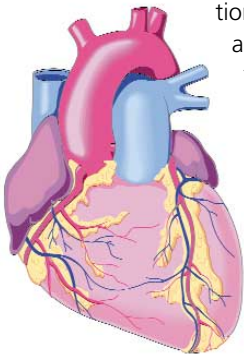
Mesothelial cells are important in maintaining homeostasis in the peritoneal cavity. However, two recent studies showed that, after prolonged extrinsic stimuli, mesothelial cells underwent characteristic morphologic changes and caused peritoneal fibrosis. Yanez-Mo et al found that mesothelial cells undergo a transition from an epithelial phenotype to a mesenchymal phenotype with a progressive loss of epithelial morphology, and acquire a migratory phenotype. Immunohistochemical studies of peritoneal-biopsy specimens from PD patients showed that mesothelial cells became fibroblast-like cells entrapped in the stroma. Another study from Yang et al found that mesothelial cells underwent trans-differentiation into myofibroblast-like cells when cultured with TGF-beta. It appears, therefore, that TGF-beta may be responsible for the trans-differentiation of mesothelial cells.

Comment: These two studies provide laboratory proof to the findings of the Cardiff peritoneal biopsy registry (Williams JD, et al. *J Am Soc Nephrol* 2002). It is now clear that, as a dialysis membrane, the peritoneum probably has a limited life-span under the current technology. On the other hand, the two studies suggest a number of potential therapeutic targets for further study.

- Yanez-Mo M, et al. Peritoneal dialysis and epithelial-to-mesenchymal transition of mesothelial cells. *N Engl J Med* 2003;348:403-413.
- Yang AH, et al. Myofibroblastic conversion of mesothelial cells. *Kidney Int* 2003;63:1530-1539.

The impact of coronary and valvular calcifications

Cardiac calcification is frequent among PD patients, but its clinical relevance is not completely understood. Stompor et al found that over half of PD patients had coronary artery calcification, detected by multirow spiral computed tomography. Patients with more severe coronary artery calcification also had higher serum levels of inflammatory markers. In addition to coronary calcification, Wang et al recently reported that valvular calcification was present in one third of PD patients. The presence of valvular calcification was an independent predictor of all-cause mortality and cardiovascular death. Interestingly, valvular calcification appeared to be synergistic with atherosclerotic disease (one-year mortality was 85% when both were present, and 13% when either was present).



Comment: The two studies confirm what most nephrologists believe. The next step is to test whether anti-inflammatory agents and judicious valvular replacement would be beneficial.

- Stompor T, et al. An association between coronary artery calcification score, lipid profile, and selected markers of chronic inflammation in ESRD patients treated with peritoneal dialysis *Am J Kidney Dis* 2003;41:203-211.
- Wang AY, et al. Cardiac valve calcification as an important predictor for all-cause mortality and cardiovascular mortality in long-term peritoneal dialysis patients: a prospective study. *Am Soc Nephrol* 2003;14:159-168.

Aminoglycosides and residual renal function

Residual renal function is an important determinant of mortality and morbidity in PD patients. It is generally believed that aminoglycosides can accelerate the decline of residual renal function as a result of their nephrotoxicity. Baker et al found no significant differences in the estimated GFR or urine output between PD patients who did and did not receive aminoglycoside treatment. If anything, patients with peritonitis treated with an aminoglycoside had a marginally slower decline in residual GFR than the others (-0.08 versus -0.17 ml/min/month).



Comment: Because of the low cost and convenient administration, aminoglycosides remain the anti-biotic of choice for many nephrologists. To them, this study is certainly reassuring. Notably, the rate of residual renal function decline in the aminoglycoside-treated group is almost identical to renal function loss in normal population.

- Baker RJ, et al. Empirical aminoglycosides for peritonitis do not affect residual renal function. *Am J Kidney Dis* 2003;41:670-675.

PD News

Good News! Join the ISPD and apply for scholarship!

If you need financial support for training in a PD center of excellence within Asia or Australia, you may now apply for the *ISPD Asian Chapter Scholarship*. Conditions and Application forms are available at the ISPD Web site at www.ISPD.org/asian.html.

Deadline for application: 31 December, 2003

Did you hear what happened in Hong Kong, 13-15 December, 2002?

Over 1000 nephrologists, renal nurses, scientists and industry representatives gathered over that weekend in Hong Kong for the First Asian Chapter Meeting of the ISPD. Some 90% of the participants were from Asia. The enthusiasm attested to their untiring quest for new knowledge and yearning for experience sharing in the field of PD in Asia. People returned home with the joy and excitement of newly acquired knowledge and the conviction that PD is a successful treatment for renal failure patients.

Presentation slides from the First Asian Chapter Meeting are available for viewing at www.acm-ispd.org/23.htm until June 2004.

We are looking forward to the Second Asian Chapter Meeting in Hyderabad, India, in January, 2005. Be prepared to attend and present your clinical data or research results to your Asian colleagues.



Experts from Hong Kong, China, India, Malaysia and Sweden in lively discussions on PD in Asia.



The Local Organizing Committee with the Present and Immediate-Past Presidents of the ISPD.

Upcoming PD Meetings

ISPD-EuroPD 2004

28-31 August, 2004, Amsterdam, The Netherlands
President: Professor Raymond T. Krediet
Web site: www.ispd-europd2004.org

ISPD-Second Asian Chapter Meeting

21-23 January, 2005, Hyderabad, India
Organizing Chairman: Dr. K. S. Nayak
Contact: nayak@pol.net.in

Other Nephrology Meetings in the Region

International Society of Nephrology-2004 Conference on Prevention of Progression of Renal Disease

29 June-1 July, 2004, Hong Kong SAR, China
Web site: www.isn2004hkconference.org

Third World Congress of Nephrology

26-30 June, 2005, Singapore
Web site: www.WCN2005.org

From the Editorial Office

If you want to communicate PD news or PD data through the newsletter to other Asian colleagues, or you have comments or suggestions regarding the newsletter, please send your message to the Newsletter Editor.

You are most welcome to distribute this newsletter electronically or in printed form to your colleagues or other people interested. Currently, the newsletter is prepared in portable document format (PDF). Hypertext Markup Language (HTML)

format may be considered in future issues, depending on the preference of the recipients. If you or your colleagues want to receive this newsletter directly from our editorial office, please send your e-mail address to: meeting@medimedia.com.hk

To our industry partners:

The editorial office welcomes your assistance in distributing this newsletter in electronic or printed form to the dialysis community. If you are interested in sending scientific messages through the newsletter, please contact me at: fkli@hku.hk



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