



ISPD Asian Chapter Newsletter

International Society for Peritoneal Dialysis (ISPD)

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From the Editorial Office

Dear All,

In this issue, we are delighted to have Dr. T.W. Kao from Taiwan to discuss her experience in automated peritoneal dialysis. You are most welcome to distribute this newsletter electronically, or in printed form, to your colleagues or other people who may be interested. If you or your colleagues would like to receive this newsletter directly from our editorial office, please send your e-mail address to: ispd@multi-med.com

Sincerely,

Dr. Cheuk-Chun Szeto

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To our industry partners:

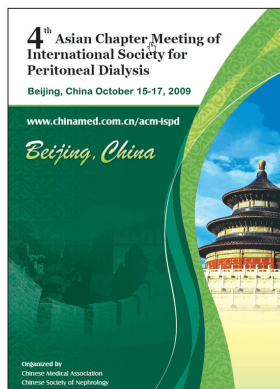
The editorial office welcomes your assistance in distributing this newsletter in electronic or printed form to the dialysis community. If you are interested in sending scientific messages through the newsletter, please contact the editor at:

ccszeto@cuhk.edu.hk

News from the ISPD Asian Chapter

News about the 4th ISPD ACM

The 4th ISPD Asian Chapter Meeting (ACM) will be held in Beijing October 15-17, 2009, and jointly sponsored by the ISPD and the Chinese Society of Nephrology. This meeting will highlight the new features of peritoneal dialysis therapy, especially its new development in Asian countries. Symposia on peritoneal membrane, cardiovascular disease, factors for successful long-term dialysis, Centers of Excellency, key factors for the successful growth of PD in Asia, nutrition, and rehabilitation, will be presented in this meeting. Debates on dialysis modality selection and clinical outcome as well as keynote lectures on humanized care, state-of-the art lectures on outcomes in HD and PD, chronic disease management, and optimizing PD therapy will also be presented. The meeting venue is located beside the main stadiums of the Olympic Games. The meeting is now open for abstract submissions. More information can be obtained through www.chinamed.com.cn/acm-ispd.



The 5th ISPD ACM has opened for bidding

The 5th ISPD-ACM is scheduled to be held in 2011. For those who are interested in hosting the 5th ACM, please send bidding information including the date of the meeting, the organizing committee, and the budget proposal electronically to Professor Tao Wang, Division of Nephrology, Peking University Third Hospital, Beijing, China. Email: wangt@bjmu.edu.cn

Baxter International and Peking University Third Hospital advance treatment of chronic kidney disease through region's first education and research academy

In 2008, Baxter International Inc. through its subsidiary, Baxter Asia Pacific, has, together with the Peking University Third Hospital, launched Baxter Scientia Asia Pacific, one of the region's leading academies for education and research that aims

to improve the care of kidney disease patients and make high quality peritoneal dialysis (PD) available to a broad range of patients. By combining the core competencies of both Baxter and Peking University Third Hospital, healthcare professionals in the region will be able to harness in-depth knowledge and experience gained at Baxter Scientia Asia Pacific to:

1. Establish their own PD centers of excellence
2. Deliver quality-assured PD therapy to patients
3. Address patients' needs for high quality care

Baxter Scientia Asia Pacific has already organized six courses in its Training Program in 2008. Training courses have been conducted in both English and Mandarin. These courses have given participants a realistic and hands-on approach to issues faced by ESRD patients. The courses have gained a lot of positive feedback so far, and the participants have gained insight to the real-life application of PD therapy and are now more confident in this therapy.

In 2009 there will be more than 10 courses organized by Baxter Scientia. Limited scholarships are available to those participants in need of financial support and who would otherwise not be able to attend the courses. Funding is also available for nephrologists and nurses who want to do clinical and translation research and would like to spend 1-3 years at Peking University. For further information, please contact Professor Tao Wang, Division of Nephrology, Peking University Third Hospital, Beijing, China. Email: wangt@bjmu.edu.cn

NEWS from the ISPD

The new ISPD council

After the election in June 2008, the new ISPD council is as follows:

President: John Burkart (USA)

President-Elect: Simon Davies (UK)

Secretary: Olof Heimbürger (Sweden)

Treasurer: Isaac Teitelbaum (USA)

Council members from Asia:

Tao Wang (China)

K.S. Nayak (India)

Frances Chiu (Nurse, Hong Kong)

And council members from other continents



Questions about PD? Ask!

Since the 'Ask the Experts' function was launched in mid-2008, we have received quite a few questions from doctors and nurses from around the world with clinical questions about PD, and

this feature has helped many to solve their problems with answers to their queries.

To highlight the educational purpose of this function, the title has now been changed to 'Questions about PD? Ask!' If you have a question about PD, you can simply visit the ISPD website and ask.

The archives of the questions and answers can also be found on the ISPD website. Reading them is both fun and educational!

Asian Chapter Scholarship

This scholarship supports training for up to 3 months in clinical PD for doctors and nurses from Asia. Application deadlines for each round occur twice a year in June and December. The next deadline is December 30th, 2008.

Details and application procedures can be found under *Regional Chapters – Asian Chapter* on the ISPD website, www.ispd.org.

Regional Chapter Meetings, 2009

There will be no ISPD Congress in 2009, but there will be 3 ISPD regional chapter meetings. They are:

- **2nd Latin American Chapter Meeting**
July 30-31, 2009 Foz do Iguaçu, Brazil
- **3rd North American Chapter Meeting**
August 28-30, 2009 Vancouver, Canada
- **4th Asian Chapter Meeting**
October 15-17, 2009 Beijing, China

These chapter meetings target the specific needs of the region. For further information, Please visit www.ispd.org.

Renew your ISPD membership...

The ISPD has been growing steadily in the last few years, and to those whose membership expires by the end of 2008, please remember to renew your membership either on-line or by downloading the renewal forms.

...or Join the ISPD!

The ISPD would also like to invite anyone with interest in PD to join our membership. Benefits of joining the ISPD include special registration fees at ISPD meetings conferences, online access to the ISPD guidelines, eligibility for ISPD sponsored

grants and scholarships, and a subscription to *Peritoneal Dialysis International*.

There is an institutional membership with special pricing for developing countries.

Please visit www.ispd.org for more details

Upcoming PD-related Meetings

29th Annual Dialysis Conference

March 8-10, 2009 George R. Brown Convention Center, Houston, Texas

Web site: <http://som.missouri.edu/CME/2009ADC.shtml>

National Kidney Foundation 2009 Spring Clinical Meeting

March 25-29, 2009 Gaylord Opryland, Nashville, TN

Web site and registration at: www.kidney.org

World Congress of Nephrology 2009 – Milan, Italy

May 22-26, 2009 Milan, Italy.

The WCN 2009 is a joint meeting between ERA-EDTA and ISN.

Abstract deadline: 9 January 2009

Web site: <http://www.wcn2009.org/sites/0/IT/default.tpl>

The 9th European Peritoneal Dialysis Meeting

October 9-12, 2009 Palais des Congrès, Strasbourg.

Abstract deadline: 29 May 2009

Web site: <http://www.europd.com/>

Mark your diary!

Literature Review

A Study on Peritoneal Biopsy ...

The relative contribution of uremic, diabetes, and PD *per se* in the pathogenesis of peritoneal interstitial fibrosis and hyalinizing vasculopathy remains unclear. A Japanese group reviewed peritoneal biopsy specimens from 173 uremic (before PD) and 80 PD patients with or without impaired ultrafiltration capacity. They found that the average peritoneal thickness was increased in uremic patients, and progressively thickened as the duration of PD prolonged. The lumen-to-vessel diameter ratio was lower in uremia than normal and progressively decreased as the duration of PD prolonged. In pre-PD peritoneum, diabetic patients had significant decrease in lumen-to-vessel diameter ratio as compared to non-diabetic patients. The average peritoneal thickness was significantly higher in patients with impaired ultrafiltration capacity than the others.

Comments: The result of this study is essentially the same as the previous one by the Peritoneal Biopsy Study Group (J Am

Soc Nephrol 2002; 13: 470-479). It seems to argue against a specific susceptibility to encapsulating peritonitis in some ethnic groups.

- Honda K, et al. Impact of uremia, diabetes, and peritoneal dialysis itself on the pathogenesis of peritoneal sclerosis: a quantitative study of peritoneal membrane morphology. *Clin J Am Soc Nephrol* 2008; 3: 720-728.

... and Another on Peritoneal Transport

The three-pore model of peritoneal fluid transport predicts that once the osmotic gradient has dissipated, fluid reabsorption will be due to a combination of small-pore reabsorption and lymphatic drainage. A British group measured fluid transport by these pathways in the presence and absence of an osmotic gradient by paired hypertonic and standard glucose-dwell studies. In the absence of an osmotic gradient, fluid reabsorption occurred via the small-pore pathway, while the contribution from lymphatic drainage is much less in most cases. This study shows that the three-pore model describes the pathways of peritoneal fluid transport well. In the presence of high solute transport, poor transcellular ultrafiltration was due to loss of the osmotic gradient and an enhanced small-pore reabsorption rate after this gradient dissipated.

Comments: This study does not only provide further support to the three-pore model, it suggests that the prediction of ultrafiltration by computer software would be reliable for clinical practice.

- Asghar RB, Davies SJ. Pathways of fluid transport and reabsorption across the peritoneal membrane. *Kidney Int* 2008; 73: 1048-1053.

Dialysis Adequacy in Anuric PD Patients

Does the current recommendation on PD adequacy also apply to anuric patients? An American group reviewed 1432 anuric PD patients. In short, Kt/V (calculated using actual body weight) <1.7 was associated with a higher mortality and more hospitalization. In this study, weekly creatinine clearance or Kt/V using ideal body weight were not predictors of mortality.

Comments: This study has several implications – it supports the current K/DOQI recommendation on PD adequacy, it suggests that we should use actual body weight for calculation, and we could confine ourselves to Kt/V and there is no need to measure weekly creatinine clearance.

- Fried L, et al. Association of Kt/V and Creatinine Clearance With Outcomes in Anuric Peritoneal Dialysis Patients. *Am J Kidney Dis*. 2008 Jul 8. [Epub ahead of print]

From the PD Industry



Dr. T.W. Kao

Getting to Like Automated Peritoneal Dialysis

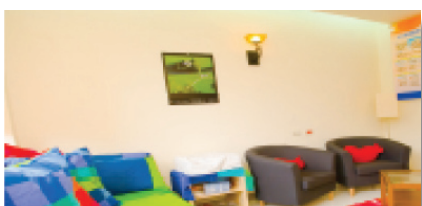
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Advantages of automated peritoneal dialysis

Automated peritoneal dialysis (APD) is a type of peritoneal dialysis in which exchanges of dialysis solution are automatically carried out by a machine during night sleep. Several benefits differentiate this modality from continuous ambulatory peritoneal dialysis (CAPD). First, patients who adopt APD enjoy a freer lifestyle; they are able to go out during the daytime without the need to perform exchanges. Regarding mental health and social functioning, APD improves many aspects of treatment-related quality of life than CAPD.^[1] In APD, fewer tubing connections and disconnections can lead to better patient compliance.^[2] An increase in solute removal may also be observed as the lying down position allows greater contact between the peritoneal membrane and the dialysis solution.^[3] Further, APD offers flexibility in enhancing dialysis efficiency, either by using icodextrin for the long-day dwell,^[4] increasing the number of solution exchanges at night via simple readjustment of the machine setting, or increasing the fill volume for the night cycles.

Growth of automated peritoneal dialysis in the National Taiwan University Hospital

APD has recently become a more popular modality for renal replacement therapy in our hospital and the number of APD patients has been gradually increasing. This growth can be attributed to several factors. First, a large PD center was rebuilt in May of 2007 to include a specially designed APD training room decorated like a cozy bedroom. With an APD machine operating beside the bed and PD nurses on stand-by, a patient can sleep without worries in this room. The patient is instructed on what to do when the machine alarm sounds or when there are troubles in dealing with it. This in-center, problem-solving learning approach speeds up the training process



APD Training Room (National Taiwan University Hospital)

and helps a patient feel more confident managing nocturnal dialysis on his or her own. Second, PD is preferred over hemodialysis in terms of expense in Taiwan.^[5] As APD has lifestyle benefits for many patients,^[1] younger patients are encouraged to try APD after they have become familiar with CAPD. Third, recent efforts from the Taiwan Society of Nephrology and several non-governmental patient groups have resulted in a subsidy for APD machine rentals granted by the Taiwan Bureau of National Health Insurance, thereby enabling the use of APD among patients with little or no income.

Successful treatment experience with automated peritoneal dialysis

Two of our diabetic patients suffered from refractory ultrafiltration failure and poor blood sugar control while on long-term CAPD. Three counter strategies were employed: (1) the patients were asked to eat at least three more egg whites everyday and/or to take ketoanalogues to maintain a serum albumin level above 4 g/dL; (2) higher doses of oral hypoglycemic agents were prescribed to ensure stricter blood sugar control; and (3) CAPD was replaced with APD using icodextrin for the long day dwell. Both patients soon achieved adequate ultrafiltration and were successfully restrained from transferring to hemodialysis.

Another patient of ours, who embraces going out for fun and business everyday as the utmost important issues in life, asked us to choose the best dialysis method for her a few months ago. Despite the fact that her blood sugar is consistently normal, she has a strong family history of diabetes mellitus. For initial dialysis treatment, she was prescribed APD using a long day dwell with icodextrin. She is allowed to have 'dry' days occasionally (when she wants to dress prettily for a formal meeting). This patient has been very happy since the beginning of her APD treatment and end-stage renal disease is no longer a nightmare to her.

Our conclusion is getting to know APD means getting to like it more.

References

1. de Wit GA, Merkus MP, Krediet RT, de Charro FT. A comparison of quality of life of patients on automated and continuous ambulatory peritoneal dialysis. *Perit Dial Int* 2001;21(3):306-312.
2. Bernardini J, Nagy M, Piraino B. Pattern of noncompliance with dialysis exchanges in peritoneal dialysis patients. *Am J Kid Dis* 2000;35(6):1104-1110.
3. Imholz AL, Koomen GC, Voorn WJ, Struijk DG, Arisz L, Krediet RT. Day-to-day variability of fluid and solute transport in upright and recumbent positions during CAPD. *Nephrol Dial Trans* 1998;13:146-153.
4. Plum J, Gentile S, Verger C, Brunkhorst R, Bahner U, Faller B, Peeters J, Freida P, Struijk DG, Krediet RT, Grabensee B, Tranaeus A, Filho JC. Efficacy and safety of a 7.5% icodextrin peritoneal dialysis solution in patients treated with automated peritoneal dialysis. *Am J Kid Dis* 2002;39(4):862-871.
5. Li PK, Chow KM. The cost barrier to PD in the developing world- an Asian perspective. *Perit Dial Int* 2001;21(Suppl 3): S307-313

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Invited by Baxter Renal Asia Pacific