In this issue, we are delighted to have Professor David Johnson and his group, share their experience of climatic influence on peritonitis. The ISPD Asia-Pacific Chapter meeting 2013 is coming this September. We look forward to seeing you in Taipei.

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 want to receive this newsletter directly from our editorial office, please send your e-mail address to me.

Sincerely,
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In Australia, peritonitis is an important cause of technique failure and infectious deaths amongst peritoneal dialysis (PD) patients. The temperature and humidity differences in individual climatic regions may influence the development of PD peritonitis by changing patient behaviour and hygiene, distribution of normal skin flora, organism virulence, and the chance of contamination. Previous studies attempting to demonstrate a relationship between changes in temperature and humidity differences in individual climatic regions may be more likely to be Aboriginal and Torres Strait Islander racial origin (adjusted odds ratio [OR]: 25.9; 95% confidence interval [CI]: 18.7 to 35.9), have lower eGFR at dialysis commencement (OR per mL/min/1.73m2: 0.89; 95% CI: 0.84 to 0.93), be current cigarette smokers (OR: 1.54; 95% CI: 1.07 to 2.21), have low transporter status (OR: 2.73; 95% CI: 1.60 to 4.66) and receive dialysis at a medium-large (3rd-quartile) centre (OR: 4.32; 95% CI: 3.33 to 5.60, using largest-centre quartile as a reference).

3. Significantly higher overall peritonitis rate and shorter time to first peritonitis amongst patients living in Tropical regions (hazard ratio: 1.15; 95% CI: 1.01 to 1.31 relative to Temperate region reference), even after adjustment for differences in demographic and clinical factors, compared to those living in Temperate, Subtropical or Other climatic regions.

4. Dissimilar microbial profile of peritonitis: Tropical (OR: 2.18; 95% CI: 1.22 to 3.90, using Temperate as a reference) and Other climatic regions (Desert and Grassland; OR: 3.46; 95% CI: 1.73 to 6.91) were associated with higher rates of fungal peritonitis, whilst culture-negative peritonitis was significantly less likely to occur in Tropical regions (adjusted OR: 0.42; 95% CI: 0.25 to 0.73).

5. Divergent approach in initiating empiric antibiotics: Patients from Tropical regions were more likely to receive treatment with vancomycin in combination with an aminoglycoside or a 1st-generation cephalosporin in combination with a 3rd- or 4th-generation cephalosporin. Moreover, in spite of higher rates of fungal peritonitis, antifungal chemoprophylaxis was less commonly used in Tropical and Other climatic regions than in Subtropical regions.

Increased episodes of peritonitis in warmer climatic conditions is biologically plausible because hot and humid climates promote skin perspiration and may influence human behaviour, such that people living in Tropical regions may be more likely to participate in outdoor activities such as swimming in oceans or waterholes. Furthermore,
humid environments can enhance the growth and persistence of bacteria on dialysis tubing and other environmental reservoirs [7]. Differences in the microbial profile of organisms responsible for peritonitis may be explained by increasing virulence of Candida species, responsible for most fungal peritonitis in Australia [8], by promoting the development of tubular, branching-type hyphal cells that facilitate deep penetration into human tissues rather than the unicellular budding yeast state [9]. The risk of fungal peritonitis may be further increased by lower rates of co-prescription of antifungal prophylaxis in Tropical (11%) and Other climatic regions (8%) compared with Subtropical regions (24%). The role of divergent approaches to the choice of empiric antibiotics in different climatic regions on the subsequent risk of fungal peritonitis is unknown and warrants further exploration.

In conclusion, our study represents the largest investigation to date and the first comprehensive multicentre examination of the effects of climatic region on the risk, microbiology, treatment, and clinical outcomes of PD-associated peritonitis. The findings clearly demonstrate that PD patients living in Tropical areas experienced higher overall peritonitis rates (particularly fungal peritonitis) and shorter times to a first peritonitis episode. Augmented peritonitis prophylactic measures should be considered in PD patients residing in Tropical climates.

References
TOP 10 PERITONEAL DIALYSIS PAPERS PUBLISHED IN 2012


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Asian Chapter Scholarship
This is a scholarship to support up to 3 months of training in clinical PD for doctors and nurses from Asia. Application deadlines for each round are twice each year (June 30th or December 31st). The next deadline is **March 31st, 2013**. Details and application procedures can be found on the ISPD website (www.ispd.org) under the Regional Chapters: Asia-Pacific Chapter.

Upcoming Meetings
**ISN World Congress of Nephrology 2013**
May 31st- June 4th, 2013
Hong Kong
Website: www.wcn2013.org

**6th ISPD Asia-Pacific Chapter Meeting**
September 27th-29th, 2013
Taipei City, Taiwan
Website: www.2013ispd-apcm.org

**Important dates:**
Registration Open: April 1st, 2013
Abstract Submissions Deadline: July 15th, 2013
Early Registration Deadline: August 30th, 2013
Regular Registration Deadline: September 20th, 2013