

Abstract No. : A540

Theme : Clinical Research on PD Fluids and Regimens

## **Changing prescribing practice in CAPD patients in Korea: increased utilization of low GDP solutions improves patient outcomes**

*Choi, H.Y.<sup>1</sup>, Park, H.C.<sup>1</sup>, Seo, B.J.<sup>1</sup>, Do, J.Y.<sup>2</sup>, Yun, S.R.<sup>3</sup>, Song, H.Y.<sup>3</sup>, Kim, Y.H.<sup>4</sup>, Kim, Y.L.<sup>5</sup>, Kim, D.J.<sup>6</sup>, Kim, Y.S.<sup>7</sup>, Kim, M.J.<sup>8</sup>, Shin, S.K.<sup>1</sup>, Lee, H.Y.<sup>1</sup>; Department of Internal Medicine, College of Medicine Yonsei University, Seoul<sup>1</sup>, Yeungnam University, Daegu<sup>2</sup>, Konyang University, Daejeon<sup>3</sup>, Inje University, Pusan<sup>4</sup>, Kyungpook National University, Daegu<sup>5</sup>, Samsung Medical Center, Sungkyunkwan University<sup>6</sup>, The Catholic University<sup>7</sup>, Seoul, Inha University, Incheon<sup>8</sup>, South Korea*

**Background.** Novel, biocompatible PD solutions have become available in recent years. In 2001 low GDP, neutral pH solutions became commercially available in Korea. To date, there are no reports regarding the adoption of these solutions in clinical practice and regarding what, if any, impact these solutions have on significant patient outcomes. **Methods.** Using a database of almost 4,000 patients treated by peritoneal dialysis in Korea we conducted a prospective, longitudinal observational study documenting the patterns of use of one novel low GDP solution (balance®, Fresenius Medical Care, St.Wendel, Germany) in 2,227 PD patients incident between January 1st 2002 and mid-year 2005. Prescribing patterns were analyzed by univariate logistic regression and outcomes including patient and technique survival and peritonitis rates were analyzed using univariate and multivariate analysis. **Results.** Within six months of the introduction of balance® to Korea 30% of patients were prescribed the new solution and that rate increased to between 70% and 80%. Prescription of the low GDP PDF was more likely in younger patients and in PD centres with larger patient populations. Treatment with low GDP PDF significantly reduced the relative risk of death (46% reduced hazard  $p < 0.00001$ ) and technique failure (36% reduced hazard  $p = 0.005$ ) and survival of diabetic patients treated with the new PD solution was identical to that for non-diabetic patients treated with standard PDF (Figure 1). No significant differences in peritonitis-free interval or peritonitis rate could be attributed to the prescribed PDF. **Conclusion.** Prescription of low GDP, pH neutral PD solutions has rapidly increased in Korea. The change appears to have resulted in a significant improvement in patient outcomes without impacting peritonitis incidence or rate. Reasons for the improved survivals are purely conjectural at this stage but an affect on residual renal function preservation appears likely to be instrumental.

Figure:

Fig. 1

[IMAGE]