

# KSN 2016 Abstract Submission

## *Dialysis*

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### **Intensive patient training reduces the risk of exit site infection and overall infection in peritoneal dialysis patients : results from TEACH Study**

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**Background:** The aim of this study is to investigate the efficacy of intensive, well-structured peritoneal dialysis (PD) training program for PD patients on the outcomes of incident PD patients.

**Methods:** This study was conducted as multi-center, single-blinded, randomized, controlled trial. One hundred four patient starting PD were randomized into two groups over a 24-month period. Patients in the conventional training group (CG) were given non-standardized in-center conventional training programs based on each hospital, while those in intensive training group (IG) were given in-center conventional training programs plus extra-training at home by expert PD nurses according to the intensive training curriculum. The primary end point of the study was exit site infection (ESI). Secondary endpoints were peritonitis and all-cause infection. Generalized Estimating Equations were used to assess the adjusted effect of training level on the primary and secondary outcomes. (NCT01204619)

**Results:** At baseline, patients in the CG and IG were similar in age, body mass index (BMI), prevalence of diabetes, cause of renal failure, academic years, biochemical parameters and GFR. CG included more male patients (73.6% vs 54.6%) and showed lower urine volume ( $917 \pm 540$  ml/day vs  $1309 \pm 661$  ml/day). Compared with the CG, the time on PD training was longer in the IG ( $10.4 \pm 7.2$  hours versus  $3.4 \pm 3.3$  hours;  $p < 0.001$ ). ESI event rate in IG was significantly lower than those rates in CG throughout the study period ( $p < 0.01$ ). All-cause infection rate in IG was also decreased than those rates in CG throughout the study period ( $p=0.03$ ). Peritonitis rate was less in the IG (0.007 per patient month) than in the CG (0.013 per patient month), but did not reach statistical significance.

**Conclusion:** Intensive PD training education on incident PD patients reduced the risks of ESI and all-cause infection.

**Keywords:** education, exit site infection, peritoneal diaysis, peritonitis, training