

Does quality of sleep change during two years in patients with peritoneal dialysis

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Background: Chronic kidney disease is a global health burden and affects about 13% of European adults. Prevalence of insomnia over 80% in all dialysis modalities has been reported. Impaired sleep has consequences on the daytime functioning which is serious in patients with advanced self-care responsibility. Few prospective studies, following sleep quality in dialysis population have been found. It is however, clear that patients in peritoneal dialysis (PD) have generally decreased QoL compared to the general population.

Aim: The aim of the study was to investigate the sleep quality during a period of two years in patients, undergoing PD treatment at the baseline assessments.

Method: This study has a prospective design with a 2-year follow-up. At baseline 55 patients with PD were included. After two years 26 were available for follow-up (Md (61) Q₁-Q₃ (48-69) years), 14 were treated in PD, three in hemodialysis (HD) and nine were transplanted (TX). Sleep quality were assessed by Uppsala Sleep Inventory (USI) and sleep sufficiency index (SSI) i.e. nocturnal sleeping time/expected sleeping time*100 were calculated as an index where a value above 80 were considered to be insufficient sleep.

Results: Sleep quality was improved in the follow up group after two years, but not statistically significant, ($p=0.07$). Sleep duration and sleep onset was improved in the follow-up group, but not significantly. Although, SSI indicated insufficient sleep both at baseline and after two years, ($p=0.3$). Difficulty to find a comfortable sleep position and leg jerks significantly predicted 71% of sleep quality outcome in the follow up group after two years, ($p<0.001$). Pruritus was a less sleep disturbing factor for the patients who had been transplanted compared to patients in PD/HD after two years ($p=0.025$).

Conclusion: This study indicates that sleep problems remains over time and that transplanted patients have less disturbed sleep than patients in dialysis treatment. With such high frequency of sleep problems in dialysis patients healthcare providers must regularly assess sleep quality and sleep disturbing factors and identify a focus for the sleep intervention to reduce the symptom burden.

Biography:

Registered Nurse, MScN Pia Yngman-Uhlin is a PhD and research supervisor in Region of Östergötland and at Linköping University in Sweden. She is working in the field of Renal Care and chronic diseases in southeast of Sweden. Her research is about sleep problems, fatigue and health related quality of life. Other areas of research are, young adults health seeking behavior and implementation of Nurse Practitioners in Swedish health care.