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P129 -A risk score tool to improve recognition and management of peritoneal dialysis patients at risk of peritonitis

Dr Jennifer Allen[1], Vanessa Keil[1], Pippa Law[1], Sr Wendy Spooner[1], Rachel Humphries[1], Sheila North[1], Sharon Caunt[1], Dr Gavin McHaffie[1]
[1]Nottingham University Hospitals NHS Trust, Nottingham, United Kingdom

Introduction
Peritonitis is a major complication of peritoneal dialysis, leading to increased morbidity, mortality and treatment failure. Risk factors for peritonitis are well recognised and can be modifiable or non-modifiable. Recognising patients at increased risk of peritonitis may prompt changes to reduce risk and can guide frequency of monitoring and retraining. As part of a programme to reduce the incidence of peritonitis, we introduced a peritonitis risk score tool to help us to recognise patients at risk of peritonitis, highlight risk factors to patients and to identify possible interventions.

Methods
We developed a risk scoring chart to be included in patients' peritoneal dialysis notes. Patients scored from 1 (excellent) to 4 (very poor) in five areas (environmental, physical, cognitive, social, emotional/ psychological). Reversible and non-reversible factors were considered. Patients were considered low risk (score 5-7), medium risk (score 8-13) or high risk (score 13-20). The score was performed in all patients on peritoneal dialysis and repeated after one year, or when clinically indicated. Scores were reviewed in quality assurance meetings and interventions were identified. Scores were shared with patients to improve engagement. Case note review was performed to investigate the effectiveness of the score in predicting peritonitis and identifying modifiable risk factors.

Results
The case notes of 15 patients who had a peritonitis risk score completed were reviewed. Patients were 60% male with a median age of 72. Median time on peritoneal dialysis was 15 months. Median score on first assessment was 8 (medium risk) and was the same on second assessment.
On first score, 5 (33%) were low risk, 8 (53%) were medium risk and 2 (13%) were high risk. After first score 6 (40%) patients had an episode of peritonitis. 2 (33%) patients with peritonitis were scored as low risk and 4 (67%) were scored as medium risk. Of those scored low risk, 2 (40%) had an episode of peritonitis, of those scored as medium risk 4 (50%) had peritonitis. No patients scored as high risk had an episode of peritonitis.
12 patients had been re-scored at the time of data collection. 2 (17%) patients had an improved score, 4 (33%) had a worse score and the remainder were unchanged.
After peritonitis risk score modifiable risk factors were identified in 10 (67%) patients. Interventions included switching to assisted APD, providing equipment, re-education or modifications to environment.

Discussion
Using our peritonitis risk score tool, the score did not correlate well with peritonitis episodes and was not able to predict episodes of peritonitis. Using the risk score did enable us to identify modifiable risk factors and work in partnership with patients to modify their risk and increase awareness of their risk status. The risk score has been part of a wider departmental programme which has led to reduced rates of peritonitis. We would recommend using a peritonitis risk score and sharing this with patients in order to improve the care and engagement of patients on peritoneal dialysis.