Clinical Outcomes Associated with Peritoneal Dialysis Catheter Placement by Interventional Radiology in a Tertiary Center

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Fluoroscopy-guided peritoneal dialysis (PD) catheter insertion has been reported as an appropriate alternative to surgical insertion in low-risk patients which leads to reduced wait time before PD initiation. The objectives of this study are to report our clinical outcomes and complications associated with PD catheter insertion by interventional radiologists (IR) and to measure the impact on prevalent PD patients and waiting time for PD catheter insertion.

We conducted a single-center retrospective review of all patients who had PD catheter insertion by IR from January 2014 to January 2018. We report number of active PD patients, complications (related and non-related to catheter insertion: perforation, bleeding, pain, exit site bleeding, infections, leaks, catheter malposition), prevalent number of PD patients and waiting time for PD catheter insertion at 3 months.

56 patients were included in our study. Median age was 55 years old (20-66) and 67% were male. At 3 months, 96% of patients were on active PD. We had 2 serious early complications (bowel perforation and hematoma). We had only 3 infections (1 exit site infection and 2 peritonitis) and 4 peri-catheter leaks in related-catheter complications. We had 12 catheter malposition. We had 5 infections (3 exit site infection and 2 peritonitis) and 2 leaks (1 pleural and 1 scrotal) in non-related catheter complications. The introduction of this technique contributed to increase the number of prevalent PD patients in our center from 60 to 84. The average time for PD catheter access has decreased from 4.5 to 1.5 months.

We experienced a high technical success rate and low complication rate with PD catheter insertion by IR. Since this technique is less invasive and cheaper than surgical insertion, its use should be encouraged as an alternative to surgical placement in low-risk patients.