

Outcomes of peritoneal dialysis catheter insertion: A single centre experience

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Introduction: Timely peritoneal dialysis (PD) catheter insertion is essential to a successful PD programme. Nephrologist led percutaneous catheter placement in suitable patients is an alternative to surgical catheter placement that is cost effective and not dependent on the available surgical and anaesthetic resources. We reviewed our experience of both nephrologist led catheter insertions and surgical catheter placement over a four-year period.

Methods: We conducted a retrospective survey of all PD catheter insertions attempted between 2014 and 2018. Demographic and outcome data was collected on all patients. All catheters that were not functioning at 3 months were classified as a failed insertion.

Results: During the time-period surveyed there were 330 attempted catheter placements in 278 patients. 207 (63%) catheters were inserted percutaneously by a nephrologist (or in a handful of cases, an interventional radiologist) while 123 (37%) were inserted by a surgeon under general anaesthetic. 57 of the medically inserted catheters were non-functional before 3 months representing a failure rate of 28% while 32 of the surgically inserted catheters were had failed at 3 months representing a failure rate of 27%. Failure of drainage was the most common reason for failure. In total 75 patients had an insertion failure at the first attempt, 29 of these patients went on to have a successful reinsertion or manipulation and become established on PD. Of the remaining patient's the majority were established on in-centre haemodialysis with four patients converting to home haemodialysis at a later date.

Discussion: Our experience suggests that nephrologist led percutaneous PD catheter placement has comparable success rates to surgical catheter insertion and represents an option for centres in terms of providing timely dialysis access. Of note, only a small number of patients whose catheter insertion failed eventually convert to home haemodialysis despite initially choosing a home therapy.