ALTERNATE SITE PERITONEAL DIALYSIS CATHETER PLACEMENT: A SOLUTION FOR PROBLEMATIC PELVIC ADHESIONS?

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INTRODUCTION:

- Renal replacement is highly utilized and a large global healthcare burden
- Peritoneal dialysis (PD) is more cost-effective and allows for more patient flexibility compared to hemodialysis
- Surgeons tasked with placement of PD catheters, thus must be able to troubleshoot associated complications and difficulties
- PD catheters commonly malfunction due to pelvic adhesions
- Aim: describe a solution to problematic pelvic adhesions by alternate PD catheter site placement

CASE DESCRIPTION:

A 65 year old male with history of diabetes, HTN, CKD, and invasive urothelial carcinoma of the bladder s/p TURBT and cystectomy with ileal conduit diversion presented after several months of a malfunctioning peritoneal dialysis catheter. He had laparoscopic revision of his PD catheter on three previous occasions due to malfunction. The patient also endorsed a difficulty with constipation. He was scheduled for diagnostic laparoscopy and laparoscopic PD catheter revision.

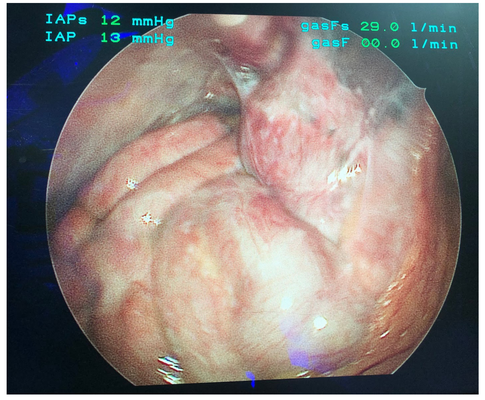


Figure 1. Dense adhesions and ileal conduit

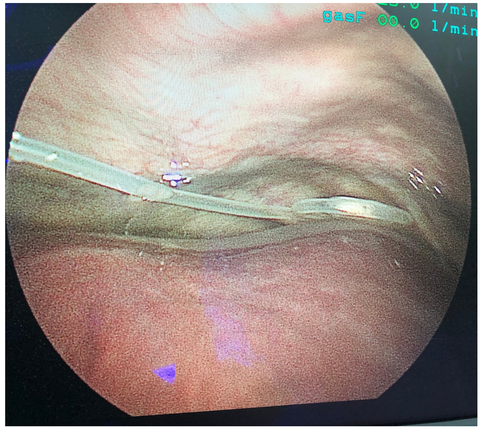


Figure 2. PD catheter placement above the liver

Upon entry into the abdomen, dense pelvic adhesions were encountered in addition to the ileal conduit (Figure 1). Mobilization was not attempted due to concern for possible bowel injury and likely reformation of adhesions that would prevent future dialysis efforts. An 8-mm trocar was inserted in the right upper quadrant and tunneled under the peritoneum in the caudal direction. The peritoneal dialysis catheter was introduced via this 8-mm port and the coiled in was tucked above the liver (Figure 2). The deep cuff was left in the preperitoneal space while the remainder of the catheter was tunneled out medially. Upon completion, a liter of heparinized saline was dwelled in the abdomen with a return of that majority of that volume.

Upon follow up at 10 months, the PD catheter was working well and was without issue.

CONCLUSION:

- Peritoneal dialysis allows for greater independence and improved quality of life
- PD catheters can malfunction for a myriad of reasons
- Patients with intra-abdominal adhesions or constipation may benefit from alternate site PD catheter placement
- This report demonstrates success with placement above the liver