# Laparoscopic Salvage of Malfunctioning Tenckhoff Peritoneal Dialysis Catheter: A Single Centre 17-Year Experience

KF Lee, WK Ma, JHL Tsu, MK Yiu

Division of Urology, Department of Surgery Queen Mary Hospital, Hong Kong

## Objective:

To review the incidence and outcomes on laparoscopic salvage of malfunctioning tenckhoff peritoneal dialysis catheter (TC), and to identify factors associated with failed salvage procedure.

#### **Patients & Methods:**

Patients aged 18 or above with laparoscopic salvage of malfunctioning TC were identified through a territory-wide database. Salvage procedure was performed using 3 laparoscopic ports. Repositioning of catheters, omentectomy, intracorporeal anchorage, adhesiolysis or in combination were done at the discretion of the operating surgeons. Patients' demographics, past medical history, surgical intervention and outcomes were analysed retrospectively.

#### **Results:**

Between July 1997 and August 2014, 1487 TC insertion procedures were performed. Laparoscopic salvage of malfunctioning TC were attempted in 57 (3.8%) patients, of which 52 cases (91.2%) were successful. The most common intra-operative finding was omental wrap (29 case, 55.8%), followed by malposition (27 case, 51.9%) and intra-abdominal adhesion (11 case, 21.2%). 30-day catheter-patency rate after salvage procedure was 82.7%. With mean follow-up of 64.2 months, the median catheter-patency period was 36 months (range 1-117 months). History of previous abdominal surgeries and peritoneal dialysis related complications before salvage procedure were associated with lower early catheter-patency rate.

### **Conclusion:**

Laparoscopic salvage of malfunctioning TC is an effective and feasible measure to prolong catheter survival.