

# Rigorous Catharsis by Oral Lactulose Is Highly Effective In Restoring a Migrated Peritoneal Catheter

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## Background & Aims

Displacement of peritoneal dialysis (PD) catheter has known for the major cause of catheter malfunction in CAPD patients. Most previous studies reported that conservative measures to restore the catheter migration are rarely successful if the problem is severe.

This study was designed to evaluate the effect of conservative treatment using a rigorous catharsis in restoring a migrated PD catheter in CAPD patients.

## Methods

- 1. Study Designs** : A prospective, observational study.
- 2. Subjects** : One hundred forty one patients that had initiated peritoneal dialysis were enrolled in this study from January 2002 to February 2013.
- 3. Peritoneal Catheter Placement and Initiation of PD** : All catheters (double-cuffed Tenckhoff catheter with a straight intraperitoneal segment) were inserted by nephrologists using a modified percutaneous placement method under local anesthesia. PD was initiated immediately after catheter insertion without a break-in period.
- 4. Documentation of Catheter Tip Migration** : Catheter tip migration was documented by KUB and abdominal lateral films.
- 5. Maneuver for Restoration of Catheter Tip Migration** : When catheter migration was documented, rigorous catharsis was induced by administration of oral lactulose with/without enema.

## Results

### 1. Demographic Characteristics.

<b>Patient (n=131)</b>	
Gender (M:F)	72 : 59 (Male 54.9%)
Age (year)	58.6±13.4
BMI (kg/m <sup>2</sup> )	24.1±3.7
Underlying disease (DM : non-DM)	80 : 51 (DM 61.1%)
<b>Catheter (n=131)</b>	
Type of catheter (Swan-neck : non-SN)	71 : 60 (SN 54.2%)
Observational period	19.9±18.5

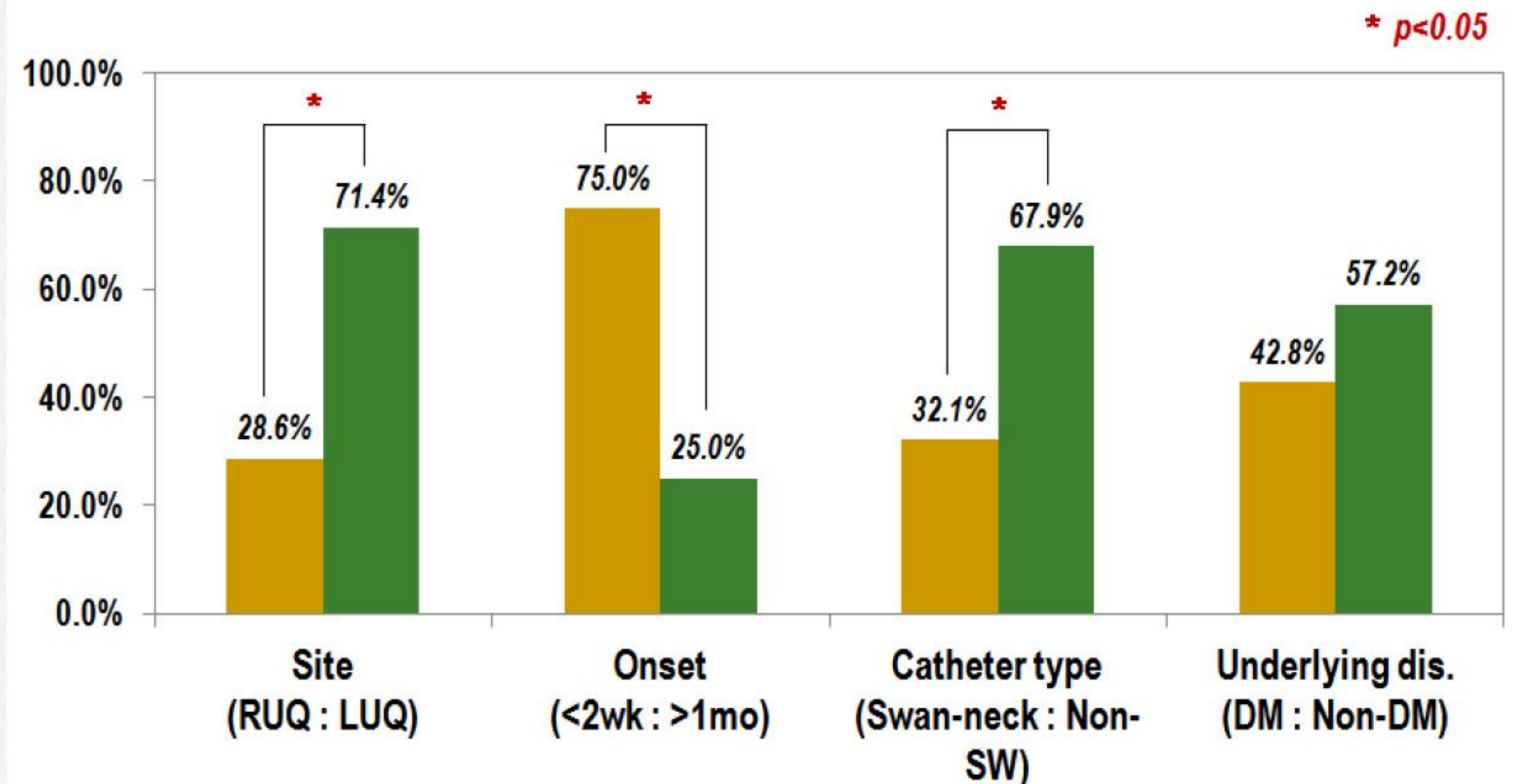
## Conclusions

PD failure by catheter tip migration was relatively rare in PD patients following percutaneous implantation although catheter migration was not uncommon. Rigorous catharsis by oral lactulose is highly effective in restoring a migrated peritoneal catheter, even though the catheter tip translocated into right upper abdomen.

## Results

**2. Incidence of Catheter Migration : 21.4% (n=28)**

**3. Characteristics of Catheter Tip Migration.**



- Diminished outflow volumes : 10.7% (n=3)
- In two of three (66.6%), diminished outflow volumes were spontaneously restored before catheter tip migration was corrected completely. Persistent outflow failure was only 3.5%.

### 4. Comparisons between Migration & Non-Migration Group

	Migration	Non-migration	p
Number of catheter [n(%)]	28 (21.4%)	51 (72.9%)	<0.05
Male gender [n(%)]	15 (53.6%)	57 (55.3%)	ns
Age (yrs)	56.1±14.9	55.7±12.6	ns
BMI (kg/m <sup>2</sup> )	23.6±3.2	24.0±3.9	ns
DM [n(%)]	12 (42.8%)	65 (63.1%)	ns
Swan-neck catheter [n(%)]	11 (39.3%)	61 (59.2%)	ns
Duration of PD (months)	16.38±13.1	20.3±19.5	ns

### 5. Restoration of Catheter Migration by Oral Lactulose

