Baxter

Catheter Insertion and Care: Preoperative Management

PD CATHETER INSERTION PROGRAM

Ideally, the optimal timing for peritoneal catheter insertion should take place at least 2 weeks prior to the use of the catheter to ensure good tissue ingrowth, fixation of the deep and superficial cuffs, and healing of the exit site.[1]

Key Assessments

Factors that impair the wound healing and exit-site care management

- History of colostomy, gastrostomy, or urostomy
- Nutritional status
- Clinical status (chronic cough, steroids use, edema)
- Obesity-pannus location[2]
- Use of adult diapers

Adapted from: Crabtree JH, *et al.* 2019

Key Assessments

Evaluate for:

Rash and evidence of infection on the abdominal wall.

Pre-existing abdominal scars.

Chronic intertrigo under breasts and abdominal skin folds.

Abdominal wall hernias, if repair is required.[3]

*Staphylococcus aureus nasal carriage should be treated with intranasal mupirocin.[4]

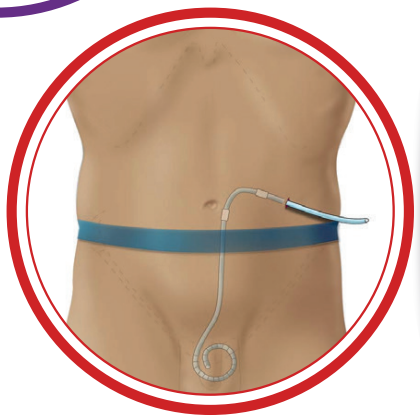
*As per hospital protocol

Key Activities

- Set up an appropriate communication plan with the operator for catheter placement and patient follow-up.
- Confirm catheter placement date.
- Determine an appropriate exit-site location.
- Inspect the patient to determine belt-line area and other anatomical features.
- Avoid scars, folded areas, pressure points, or poorly visualized area during exit-site care.[2]
- Mark exit-site using stencils or actual catheter.
- Choose appropriate catheter configuration and operative methodology.

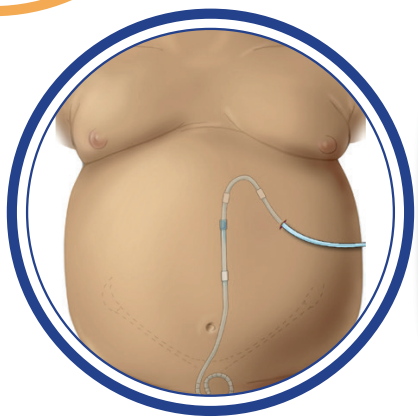
Choice of Catheter Types

Patients with belt line above the level of the umbilicus may require catheter with a preformed intercuff bend.[2]



Patients with belt line below the umbilicus may require catheter with a straight intercuff segment.[2]

Patients with morbid obesity, abdominal stomas, or urinary-fecal incontinence may require an extended catheter with an upper chest exit-site.[2]



Obesity, urinary-fecal incontinence, floppy skin folds, or abdominal stomas may require an extended catheter for upper abdominal exit-site.[2]

Standard Tenckhoff-style catheters with or without a preformed intercuff cuff bend or a Straight- or coiled-tip configurations are most commonly used.[2,3]

Illustrations adapted from: Crabtree JH, *et al.* 2017[5]

Preoperative Instructions for Patients and Caregivers

Bathing with disinfectant soap on the day of surgery.[6]

Bowel preparation.[6]

Empty bladder.[6]

Fasting of at least 8 hours prior to catheter insertion or midnight fasting as per hospital protocol.

Adapted from: Crabtree JH, *et al.* 2019

References:

1. Gokal R, Alexander S, Ash S, *et al.* Peritoneal catheters and exit-site practices toward optimum peritoneal access: 1998 update. *Perit Dial Int.*1998;18(1):11–33.
2. Crabtree JH. Selected best demonstrated practices in peritoneal dialysis access. *Kidney Int.* 2006;103:S27–S37.
3. Flanigan M, Gokal R. Peritoneal catheters and exit-site practices toward optimum peritoneal access: A review of current developments. *Perit Dial Int.* 2005;25(2):132–139.
4. Szeto CC, Li PK, Johnson DW, *et al.* ISPD catheter-related infection recommendations: 2017 update. *Perit Dial Int.* 2017;37(2):141–154.
5. Crabtree JH, Chow KM. Peritoneal dialysis catheter insertion. *Sem Nephrol.* 2017;37(1):17–29.
6. Crabtree JH, Shrestha BM, Chow KM, *et al.* Creating and maintaining optimal peritoneal dialysis access in the adult patient: 2019 update. *Perit Dial Int*. 2019;39(5):414–436.