

The Peritoneal Dialysis Kit: How to Prevent an Emergency in the Emergency Room

Clinical Research

Advancing Kidney Care

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INTRODUCTION

Peritoneal dialysis (PD) patients are instructed to report to the local emergency room (ER) for any medical issues after the dialysis center is closed (i.e., "after hours"). An effluent sample is usually requested. The ER staff often lacks experience in caring for PD patients. This may result in an improper collection of an effluent sample causing peritonitis and/or no growth culture.

Purpose: To properly educate the ER staff on how to obtain a PD effluent sample.

METHODOLOGY

- An ER kit was created for the PD patient to take with them for any ER visit. The kit consists of:
- o an 8"x 11" clear resealable plastic bag
- patient directions to report to the ER
- facility and nephrologist contact information
- written and pictorial directions on how to correctly obtain a peritoneal effluent sample
- o one sterile effluent sample bag
- two betadine caps
- In October 2010, patients at thirteen facilities were instructed on how to use the kit. A data collection tool was implemented to assess the effectiveness of the ER kit in preventing contamination of the PD system and obtaining an adequate effluent sample.

KIT COMPONENTS

Figure 1. Front Page of Emergency Room Kit



_is a peritoneal dialysis (PD) patient at:

DaVita Dialysis Belden
4685 Fulton Drive NW
Canton, OH 44718-2379
Phone: 330-649-8060
PD Nurse: XXX RN Hours of operation: 9 AM to 5 PM Mon-Fri

The PD catheter provides a portal of entry for infection into the peritoneal cavity. Aseptic technique **must** be followed to prevent bacterial contamination (peritonitis). Please contact the above dialysis facility **BEFORE** performing any dialysis related procedure.

A nurse is on-call after hours, weekends, and holidays at xxx-xxx-xxxx

Figure 3. Selected Steps from Procedure for Obtaining Peritoneal Effluent Sample

1. Gather supplies.

Procedure:

- 2. Provide patient with privacy (close curtain, doors, etc.).
- 3. Disinfect work surface.
- 4. Everyone in the room dons a mask.
- 5. Wash hands as per policy. Put on PPE.
- 6. Remove patient's transfer set from clothing and place on Chux pad.
- 7. Open effluent sample package.
- 8. Maintaining aseptic technique, remove the blue pull ring from the effluent sample bag.







Figure 2. Back Page of Emergency Room Kit

EMERGENCY ROOM KIT

If you have belly pain or a cloudy bag, call your PD nurse at xxx-xxx-xxx.

If instructed to go to the emergency room, take this kit with you.

Expiration Date of Minicap:

Replace with new Minicap **after** this date.

Figure 4. Data Collection Tool (to be completed with every ER visit)

Patient Name

ER KIT Training Date:1. Did pt. take ER KIT with them to hospital?2. Did ER staff implement the instructions in

Did the pt. develop peritonitis

AS A RESULT OF THE ER VISIT?

. Mini cap EXPIRATION date:___

the kit in sample collection?

Y__ N__

Y___ N___

Y___ N___

RESULTS

Table 1. Results of Patients Using the ER Kit

ER	ER Kits	ER Kit Used in ER or	Instances of Peritonitis when ER Kit Used
Admissions	Taken to ER	Nursing Floor	
10	6 (60%)	2 (33%)	0/2 (0%)

Reasons for not taking the ER kit

- Forgot (n=2)
- Direct admission from MD office (n=1)
- Unable to confirm if taken (n=1)

KEY LEARNINGS

- ✓ When the ER Kit was used for an effluent sample, no patient developed peritonitis as a result of an ER visit (Figure 4, Table 1).
- ✓ To promote the use of the ER kit, nurses should:
 - As part of the monthly visit, assess that the patient has an ER Kit and educate on its benefits.
 - Supply each referring hospital with an ER Kit for those instances when a patient does not bring it.
 - If a patient moves from a private home to a nursing home, review and provide the ER kit to the new residence.
 - Follow up with patients to ensure kit was taken and used by ER/nursing floor staff.
 - o For those who forget to take their ER Kit, assess why and reeducate.
- o Restock ER Kit after each admission (Figures 1,2 and 3).

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