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.

METHODOLOGY

- An ER kit was created for the PD patient to take with them for any ER visit. The kit consists of:
  - one sterile effluent sample bag
  - written and pictorial directions on how to correctly obtain a peritoneal effluent sample
  - facility and nephrologist contact information
  - patient directions to report to the ER
  - an 8"x 11" clear resealable plastic 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.

Figure 1. Front Page of Emergency Room Kit

Figure 2. Back Page of Emergency Room Kit

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

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

RESULTS

<table>
<thead>
<tr>
<th>ER Admissions</th>
<th>ER Kits Taken to ER</th>
<th>ER Kit Used in ER or Nursing Floor</th>
<th>Instances of Peritonitis when ER Kit Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>6 (60%)</td>
<td>2 (33%)</td>
<td>0/2 (0%)</td>
</tr>
</tbody>
</table>

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.
  - For those who forget to take their ER Kit, assess why and re-educate.
  - Restock ER Kit after each admission (Figures 1.2 and 3).

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