

Policy

A registered nurse who has successfully completed the peritoneal dialysis education program requires a physician's order to add antibiotics to peritoneal dialysis solution.

Collecting a specimen and doing 3 quick flushes may be done without a physician's order.

Rationale

Peritonitis should be strongly suspected in any peritoneal dialysis patient who has cloudy dialysate, abdominal pain or fever. Physician must be informed immediately.

Patient MRSA status will direct chosen antibiotic therapy. Please communicate this information to the treating physician.

Refer to literature on Stability of Antibiotics in peritoneal dialysis solution.

Supplies

Dialysis solution
Cycler and supplies **or** Twin Bag
Effluent sample bag (option for Home Choice PRO)
C & S containers

Procedure:

When Peritonitis is suspected:

1. Notify the physician/nephrologist on call immediately. You may proceed with steps 2 to 4 while awaiting physician's response.
2. Obtain specimen for **cell count, differential, gram stain, culture and sensitivity**. Specifically request "Please report sensitivity to vancomycin, cefazolin, ceftazidime and tobramycin". See the policy for Obtaining Specimens. If you are using the cycler, obtain the sample during DRAIN 1 if possible.
Note re timing of specimen collection:
 - If cloudy effluent, this is optimal sample irrespective of prior dwell time.
 - If clear effluent or equivocal result from initial sample, perform exchange with 2 hour dwell and sample at the end of this period.
3. Label specimen and send to laboratory STAT.
4. Only if patient has very severe abdominal pain: Do three dialysis exchanges without antibiotic and no dwell time (3 quick flushes). If you are using the cycler, bypass the dwell. If you are using Twin Bags, drain immediately after filling.
5. As soon as the physician's orders are obtained, administer prescribed antibiotics as directed.
Note re urgency of antibiotic administration:
 - Cloudy effluent OR severe pain +/- fever: antibiotic should be given immediately after sample collected.
 - Non-cloudy effluent and mild symptoms: results of dialysate cell count and gram stain may be reviewed by the treating physician prior to initiation of antibiotics.

References

1. Warady et al. ISPD Consensus Guidelines for the treatment of peritonitis in pediatric patients receiving peritoneal dialysis. PDI 2000.
2. Li et al. ISPD Peritoneal Dialysis-Related Infections Recommendations: 2010 Update. PDI 2010.