



**“Standing Orders for the Treatment of Peritoneal
Catheter Exit Site Infection.”**

I. DEFINITION

- A. Purulent drainage from peritoneal exit site and/or erythema around the exit site.
- B. A tunnel infection may present as erythema, edema, or tenderness over the subcutaneous tract. All patients should be assessed for possible tunnel infection and peritonitis.
- C. The patient with an exit site infection that progresses to peritonitis, or who presents with an exit site infection in conjunction with peritonitis with the same organism will usually require catheter removal.

II. PATIENT INSTRUCTION

- A. Notify NKC peritoneal staff of any purulent drainage, erythema or pain at the exit site, or any tenderness over the subcutaneous tract.
- B. Perform exit site care twice daily while drainage is present. Use Gentamicin cream daily.
- C. The use of Betadine (povidone iodine) at the exit site is not recommended.

III. LAB REQUISITION

- A. Gram stain, culture and sensitivity of any purulent drainage.
- B. Culture of erythematous exit site in the absence of drainage is not recommended

IV. EMPIRIC ANTIBIOTIC TREATMENT (pending culture result)

- A. Initiate Cephalexin 500 mg, PO BID or Trimethoprim / sulfamethoxazole 160/800 mg. PD QD until culture results are back. Modify therapy based on culture results.
- B. Notify physician.
- C. Initiate hypertonic saline soaks twice daily with exit site care.
- D. Treat a minimum of two weeks and/or until the exit site appears normal.
- E. Consider Nystatin swish & swallow 5 ml PO TID for fungal prophylaxis during extended courses of antibiotics. In females also consider intravaginal antifungal agent.

V. SPECIFIC TREATMENT (when culture results known)

A. Gram-positive Organism

1. Begin oral antibiotics:
 - a. Cephalexin 500mg. PO BID x 14 days, or:
 - b. Trimethoprim/sulfamethoxazole 160/800mg. PO QD x 14 days.
 - c. Two weeks is the minimum length of treatment.
Antibiotics must be continued until the exit site is totally normal.
2. Evaluate the exit site weekly until the infection is resolved.
3. If no improvement after one week, or in the presence of severe Staph. Aureus, consider adding Rifampin 600 mg. PO QD and obtain an effluent sample for cell count, gram stain, culture and sensitivity.
4. Adjust therapy based on culture results and sensitivities.
5. If no improvement or persistent documented infection exists at 4 weeks, consider cuff removal, or possible catheter removal.

B. Gram-negative Organism (nonpseudomonas)

1. Ciprofloxacin 500 mg PO BID x 14 days or Levofloxacin 500 mg on day 1 followed by 250 mg every other day x 14 days (7 doses total).
2. Two weeks is the minimum length of treatment.
3. Evaluate the exit site weekly until resolved.
4. Adjust therapy based on culture results and sensitivities.
5. If no improvement, treat for an additional 14 days. Send effluent for cell count, gram stain, culture and sensitivity.
6. Remind patient not to take phosphate binders with antibiotic.

C. Pseudomonas

1. Ciprofloxacin 500 mg PO BID or Levofloxacin 500 mg on day 1 followed by 250 mg every other day x 14 days (7 doses total).
2. Ceftazidime 1 gram IP daily in long dwell (minimum 6 hours) for 14-28 days.
3. Adjust therapy based on culture results and sensitivities.
4. Consider early catheter removal if there is no improvement in 14-28 days.

VI. RECURRENT EXIT SITE INFECTION

Defined as recurrent infection within 30 days of completion of treatment)

- A. Follow initial protocol.
- B. Confirm that the patient is using Gentamicin cream per protocol.
- C. Consider prompt catheter removal for refractory cases.
- D. Assess for tunnel infection and peritonitis.

VII. Notify physician of condition of exit site and initiation of protocol.

Physician Signature _____ Date: _____

Acknowledgement:

Peritoneal Dialysis International, Vol. 25, page 107-131, “Peritoneal Related Infections Recommendations: 2005 Update.”