ANMC Pediatric Clostridium (Clostridioides) difficile Infection (CDI) Treatment Guideline

Special Pediatric Considerations

Infants and toddlers have high rates of non-pathologic colonization with Clostridium difficile. Routine testing is not recommended in children <2 years old.

1-2 year(s) of age:
- Routine testing is not recommended due to high colonization rates (colonization rates can exceed 40%)
- Test if infant has evidence of pseudomembranous colitis or toxic megacolon
- Positive test result indicates possible CDI → continue to seek alternate diagnoses

≥ 2 years of age:
- Testing is recommended for patients with prolonged or worsening diarrhea AND risk factors or relevant exposures

Risk Factors
- Recent hospitalization or known contact in the community
- Antibiotics in previous 90 days
- PPI/H2 Blocker use (risk of causing C. difficile: PPI>H2 Blocker)
- Immunocompromised (including malignancy, solid organ transplant, IBD)
- Renal insufficiency
- Hirschsprung disease or other underlying bowel disease
- History of GI tract surgery
- Gastrostomy or jejunostomy tube; prolonged NG tube insertion
- Repeated enemas
- Diaper use in older children

Clinical Findings

Signs & Symptoms
- Abdominal pain/tenderness
- ≥ 3 watery/unformed stools in a 24 hour period
- Mucous and/or blood in stool
- Fever
- Decreased albumin
- Elevated WBC, SCr

Confounding Factors – Testing Discouraged
- <2 years old (see above)
- Laxative or enteral feeding use within previous 24-48 hours

Laboratory Findings
- Positive Clostridium difficile DNA amplification test (2 hour turnaround for results)
- Test of cure should not be performed. Repeat tests sent within 7 days will be rejected by the microbiology department

Antibiotic Selection

First Recurrence (Non-Severe)
- Metronidazole 7.5 mg/kg PO/IV TID (max 500 mg/dose) OR
- Vancomycin 10 mg/kg PO QID (max 125 mg/dose) x14 days

Second or Greater Recurrence
- Vancomycin 10 mg/kg PO QID (max 125 mg/dose) x14 days, followed by 4 week taper:
  - Vancomycin 10 mg/kg PO BID (max 125 mg/dose) x7 days, then
  - Vancomycin 10 mg/kg PO QD (max 125 mg/dose) x7 days, then
  - Vancomycin 10 mg/kg PO QOD (max 125 mg/dose) x7 days, then
  - Vancomycin 10 mg/kg PO q72hr (max 125 mg/dose) x7 days

Consider for referral for fecal microbiota transplantation after multiple recurrences with standard antibiotic treatment and discussion with pediatric ID and pediatric gastroenterology.

Notes
- If ongoing therapy with C. difficile predisposing antimicrobial regimen, upon completion of 10 days of QID dosing continue enteral vancomycin BID until completion of therapy
- C. difficile predisposing antimicrobial therapy should be narrowed when possible and treatment should be for the shortest duration clinically necessary
- Discontinue PPIs, H2 blockers if no ongoing indication (Exclusion: GI bleed, H. pylori infection, gastric/duodenal ulcer, erosive esophagitis, chronic NSAID/steroid use)

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