Management of *Clostridiodes difficile* Infection

Diagnosis

- Clinical spectrum of infection ranges from watery diarrhea with lower abdominal pain, cramping, and nausea (with or without low-grade fevers and leukocytosis) to severe or fulminant colitis
- Case definition: three or more unformed stools in a 24-hour period without an alternative explanation, and positive stool test for *C. difficile*
- Patients with severe disease may have ileus without stool output; these patients generally have colitis on imaging, abdominal pain/distention, and systemic illness
- Nucleic acid tests detect the gene that produces the toxin that causes *C. difficile* infection (CDI) but not the presence of the toxin itself; thus, given that up to 30% of hospitalized patients can be colonized with *C. difficile* but not actively infected, patients with positive nucleic acid tests who do not have symptoms consistent with CDI should not be treated for CDI
- 30% of patients have recurrent CDI within 30 days of treatment (retest to confirm the diagnosis)
- *C. difficile* testing recommendations
  - Do not test formed stool samples
  - Confirm patient has not received a laxative in the previous 48 hours
  - Do not test infants younger than 1 year of age; reasonable to not test infants younger than 2 years of age
  - Do not repeat testing within 7 days

Treatment

- Discontinue antibiotics not used for CDI treatment whenever possible
- If antibiotic therapy is still needed, select the narrowest agent possible and avoid agents with a strong association with CDI (i.e., fluoroquinolones, clindamycin, and third- and fourth-generation cephalosporins)
- Discontinue gastric acid suppression medications whenever possible
- Do not prescribe antimotility agents

- **Nonsevere CDI**
  - Adults: vancomycin (125 mg orally [PO] 4 times a day) or fidaxomicin (200 mg PO 2 times a day) for 10 days
  - Children: metronidazole (7.5 mg/kg/dose PO 4 times a day or vancomycin (10 mg/kg/dose PO 3 times a day; max dose 500 mg/dose) for 10 days

- **Severe** (WBC ≥15,000 cells/mL and/or serum creatinine ≥1.5 mg/dL associated with CDI) or **fulminant CDI** (hypotension, intestinal perforation, toxic megacolon)
  - Obtain abdominal imaging and prompt surgical consultation
  - Adults: vancomycin 125 mg PO/nasogastric tube (NG) 4 times a day for severe colitis; vancomycin 500 mg PO/NG 4 times per day for fulminant colitis for 10 days
  - Children: vancomycin 10 mg/kg/dose PO/NG 4 times a day (max 500 mg/dose) for severe or fulminant colitis for 10 days
  - If ileus present, vancomycin can also be administered via rectum as a retention enema, along with metronidazole intravenously for 10 days

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