

**The Mount Sinai Health System Divisions of Infectious Diseases and Gastroenterology Consensus Guidelines to Diagnosing and Treating *Clostridium difficile* Infection (CDI)**

**Testing:**

- Do NOT send stool for *C. difficile* testing without diarrhea ( $\geq 3$  loose bowel movements in 24 hours).
- Do not send stool if there has been recent use of laxatives. Discontinue laxatives and consider testing if diarrhea continues beyond 48 hours and there is no alternative explanation for the diarrhea.
- The Clinical Microbiology Laboratory will reject stool that are not diarrheal (Bristol Stool Chart 1-4).
- Repeat samples are not necessary as the negative predictive value of a single test is  $>99\%$ .
- Do not send repeat specimens to document “test of cure.” The test can remain positive for weeks after treatment. Do not repeat testing in patients who have undergone recent fecal microbiota transplantation (FMT) for the same reason.
- The Clinical Microbiology Laboratory will not accept stool specimens from patients with a negative test within the past 7 days or a positive test within 14 days.
- Downtime forms will only be accepted in the setting of a known EPIC downtime or with ID/Clinical Microbiology Approval.

**Treatment:**

STOP ALL ANTIBIOTICS WHEN POSSIBLE

Severity	Clinical Manifestations	Treatment
Asymptomatic colonization	Positive <i>C. difficile</i> test without diarrhea, ileus, or colitis	No treatment necessary
Mild to moderate	Positive <i>C. difficile</i> test with diarrhea and no manifestations of severe disease	Metronidazole 500 mg PO/NGT every 8 hours for 10 days  OR Vancomycin 125 mg PO/NGT every 6 hours for 10 days <ul style="list-style-type: none"> <li>• No response to PO metronidazole after 5 days of therapy</li> <li>• Intolerance to PO metronidazole</li> <li>• Pregnant or breastfeeding</li> <li>• Underlying inflammatory bowel disease (IBD)</li> </ul>
Severe	Positive <i>C. difficile</i> test with diarrhea and $\geq 1$ of the following attributable to CDI <ul style="list-style-type: none"> <li>• WBC <math>\geq 15,000</math></li> <li>• Increase in serum Cr <math>&gt;50\%</math> from baseline</li> </ul>	Vancomycin 125 mg* PO/NGT every 6 hours for 10-14 days  Consider GI consultation for Fecal Microbiota Transplantation (FMT) in patients without improvement on 5 days of therapy
Severe Complicated*	Criteria as above with $\geq 1$ of the following attributable to CDI <ul style="list-style-type: none"> <li>• Hypotension</li> <li>• Toxic megacolon</li> <li>• Lactate <math>\geq 4</math></li> <li>• ICU admission for severe disease</li> </ul>	Vancomycin 500 mg PO/NGT every 6 hours AND Metronidazole 500 mg IV every 8 hours  If unable to tolerate oral therapy can consider Vancomycin retention enema (500 mg in 100 mL Normal Saline every 6 hours)  Please consult ID and Surgery Consider GI consultation for Fecal Microbiota Transplantation (FMT)

\* There is no evidence for increased doses for oral vancomycin for CDI. Higher doses may be considered in the setting of severe complicated CDI and require ID approval.

- Avoid use of anti-motility agents in patients with CDI.
- Avoid use of binding agents (e.g. cholestyramine) as they can bind oral vancomycin.
- Routine prophylactic use of metronidazole or oral vancomycin is not recommended.

#### **Recurrent CDI**

- Resistance to either metronidazole or vancomycin has not been described
- Recurrence occurs in approximately 25% of patients and can be due to failure to eradicate spores or acquisition of a new strain. The risk for recurrence increases with every bout of CDI.

Episode	Treatment
First recurrence	Same regimen as first episode.
Second recurrence	Tapered PO Vancomycin Dose 125 mg four times a day x 10 days 125 mg twice a day x 7 days 125 mg daily x 7 days 125 mg daily every other day for 7-14 days  Consider FMT
Third recurrence	Consider FMT

- Avoiding use of anti-motility agents in patients with CDI
- Avoiding use of binding agents (e.g. cholestyramine) as they can bind oral vancomycin
- Routine prophylactic use of metronidazole or oral vancomycin is not recommended

#### **References**

Cohen SH, Gerding DN, Johnson S *et al.* Clinical Practice Guidelines for *Clostridium difficile* Infection in Adults: 2010 Update by the Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA). *Infect Control Hosp Epidemiol.* 2010; 31(5); 431-55.

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