

SUBJECT: Guidelines for **Adult** Treatment of *C. difficile* (CDI) Infection and Antibiotic Stewardship (please see CHAM guidelines for pediatrics)

EFFECTIVE DATE: 1/19/2022

DISTRIBUTION: Infection Prevention and Control Online Manual

Cross Reference: Montefiore Medical Center – Infection Prevention & Control Online Manual Isolation Policy I-05, MMC Pharmacy & ID C. difficile Treatment Policies

Antimicrobial Stewardship (ASP) *Clostridioides difficile* treatment guidelines complement the multidisciplinary Montefiore CDI Management Guidelines. The following are based on national guidelines, adapted to local policies and practices.

1. Stop, deescalate, or shorten antibiotic duration whenever possible.
2. Avoid antiperistaltic agents such as loperamide. Decrease usage of medications with anti-motility properties such as morphine and its analogues.
3. Stop acid suppressive therapy, such as PPIs and H₂ receptor antagonists, whenever possible; unless there is a clear indication, avoid routine/long term PPI prescribing to reduce risk of adverse effects.
4. Do not order laxatives and stool softeners in CDI patients. Consider alternative diagnosis for diarrhea in patients already receiving laxatives/stool softeners; avoid testing these patients.
5. PLEASE NOTE:
 - Oral fidaxomicin requires ASP/ID approval as a Category I antimicrobial
 - Oral vancomycin 125mg Q6h will NOT require approval for CDI treatment within the first 72 hours. **Stewardship/ID approval will be required:**
 - After 72 hours of use (ongoing dosing based on *C. difficile* test result and clinical response)
 - For CDI prophylaxis
 - For vancomycin doses >125 mg

CDI Treatment Guideline (Inpatient)	
Initial Episode	<p>Vancomycin 125mg po q6h x 10 days</p> <p style="text-align: center;">OR</p> <p>Fidaxomicin 200mg po q12h x 10 days for patients meeting one of the following criteria:</p> <ul style="list-style-type: none"> • Age ≥ 65 years <i>with</i> WBC ≥15,000 cells/mL <i>or</i> significant acute renal impairment • Solid organ or bone marrow transplant • Currently receiving or received chemotherapy or immune modulating agent within past 30 days • HIV with CD4 ≤200 • Cirrhosis
	<p>Metronidazole 500mg po q8h x 10-14 days if above agents are unavailable</p>
First CDI Recurrence	<p>Vancomycin 125mg po q6h x 10 days</p> <p style="text-align: center;">OR</p> <p>Fidaxomicin 200mg po q12h x 10 days for patients meeting one of the following criteria:</p> <ul style="list-style-type: none"> • Age ≥ 65 years • Solid organ or bone marrow transplant • Currently receiving or received chemotherapy or immune modulating agent within past 30 days • HIV with CD4 ≤200 • Cirrhosis
	<p>Vancomycin taper: 125mg po q6h x 10 days followed by tapering over 6 weeks: Week 1: 125mg po q8h Week 2: 125mg po q12h Week 3: 125mg po q24h Week 4: 125mg po q48h Weeks 5, 6: 125mg po every 3 days</p> <p style="text-align: center;">OR</p> <p>Fidaxomicin 200mg po q12h x 10 days <i>or</i> 200mg po q12h x 5 days, then followed by q48h x 10 doses (20 days)</p>
Multiple CDI Recurrences	<p>Obtain ID and GI consult for fecal microbiota transplantation (FMT). FMT offers highest chance of cure compared to other available treatments.</p>
	<p>Obtain ID and GI consult for fecal microbiota transplantation (FMT). FMT offers highest chance of cure compared to other available treatments.</p>
Fulminant CDI <i>(hypotension, shock, ileus, or mega-colon)</i>	<p>Vancomycin 500 mg po/NG/PEG q6h (duration as per ID consult)</p> <p>If ileus or reduced gut motility due to shock: Add metronidazole 500 mg <i>IV</i> q8h +/-vancomycin 500mg q6h in 100ml NS via rectal tube, clamp rectal tube for 1 hour</p>
	<p>Obtain STAT Surgical and ID consults. Avoid fidaxomicin alone or combination with other agents</p>

Additional Treatment Notes:

- Dual therapy with PO vancomycin plus PO metronidazole has no proven additional benefit over PO vancomycin monotherapy.
- There is no added benefit of PO vancomycin 250mg.
- IV vancomycin is not efficacious for the treatment of CDI and should never be used.
- Prophylactic vancomycin 125mg po daily while on broad spectrum antibiotic(s) and continued until 5 days after completion of systemic antibiotics can be considered in certain patients. When selecting patients for secondary prophylaxis, consider the length of time since previous CDI treatment, number of previous CDI episodes, severity of prior episodes, underlying comorbidities, and risk associated with concomitant antibiotics. Stewardship or ID approval is required for PO vancomycin prophylaxis
- Bezlotoxumab is a monoclonal antibody that binds to Toxin B of *C. difficile*. Clinical data suggests bezlotoxumab may prevent CDI recurrence when administered along with standard-of-care. However, there are limitations to trials (i.e. minimal use of fidaxomicin) and barriers to implementing use (i.e. medical insurance coverage). Consider outpatient bezlotoxumab therapy in patients at high risk for recurrence with ID consultation.
- Adjunctive therapy with IVIG for CDI has limited data. It may be helpful in patients with hypogammaglobulinemia - use for this indication requires formal consultation by Infectious Diseases (and required approval 24/7). IVIG dose will be determined in conjunction with ID and ASP-ID Pharmacists.
- Cholestyramine binds to a variety of drugs in the gastrointestinal tract including PO vancomycin, thereby rendering effective agents potentially ineffective. Efficacy data for cholestyramine is questionable.
- For questions about appropriate *C. difficile* testing, contact Antimicrobial Stewardship or Infection Prevention and Control through the paging grid.

This guideline was prepared by the Antimicrobial Stewardship Program and ID faculty, and approved by Montefiore Health System Antimicrobial Council on January 19, 2022