CDI Medical Management Algorithm

SUSPECTED OR CONFIRMED CDI

Diarrhea (unformed or watery stools ≥ 3 in 24 h) **AND**

1. Pending *C. difficile* test with high clinical suspicion **OR**
2. Positive *C. difficile* test **OR**
3. Endoscopic or histologic evidence of pseudomembranous colitis

INSTITUTE CONTACT PRECAUTIONS

EVALUATE CDI SEVERITY

Assess and document patient's/resident's clinical status (vital signs, hydration etc.)
Obtain baseline CBC and differential, electrolytes, and serum creatinine

MILD OR MODERATE

(Does not meet criteria for SEVERE or FULMINANT)

FIRST EPISODE

- Review all antibiotics and discontinue unless clearly indicated, or document reason for continuation
- Discontinue all proton pump inhibitors (PPIs) unless clearly indicated or document reason for continuation
- Stop all anti-peristaltic & pro-motility agents
- **Metronidazole 500 mg PO/NG TID x 10-14 d ^**
- If diarrhea not improving by day 4-6, or patient/resident intolerant to oral metronidazole **change to vancomycin 125 mg ☆ PO/NG QID x 10-14 d ++**
- If symptoms worsen, re-evaluate for CDI severity and follow appropriate algorithm pathway

SEVERE

Clinical criteria (any of the following):

- WBC >15,000/mm^3 # **OR**
- Acute kidney injury with rising serum creatinine (SCr) (e.g. SCr ≥1.5 times premorbid level or SCr ≥175 µmol/L) **OR**
- Pseudomembranous colitis **OR**
- Clinical judgment (age > 60, fever, etc.

ANY EPISODE

- Review all antibiotics & discontinue unless clearly indicated or document reason for continuation
- Discontinue all PPIs unless clearly indicated or document reason for continuation
- Stop all anti-peristaltic & pro-motility agents
- **Vancomycin 125 mg PO/NG QID x 10-14 d ☆**
- Consider ID, GI, and/or General surgery consult
- Consider CT scan of the abdomen if clinically indicated

FULMINANT

(any of the following):

- Toxic megacolon
- Perforation
- Signs of peritonitis
- Ileus
- Severe sepsis/septic shock
- Severe acute renal failure (e.g. oliguria or dialysis requirement)

ANY EPISODE

- Review all antibiotics & discontinue unless clearly indicated or document reason for continuation
- Discontinue all PPIs unless clearly indicated and document reason for continuation
- Stop all anti-peristaltic & pro-motility agents
- **Vancomycin 125 mg PO/NG QID * with OR without Metronidazole 500 mg IV Q8H for 10-14 days**
- **If complete ileus OR if unable to take PO/NG vancomycin, consider adding vancomycin 500 mg via cecal tube or rectal administration ⊘**
- Obtain specialist (ID, GI, and/or General Surgery) and ICU consult immediately as directed by level of care

FIRST RECURRENCE (MILD OR MODERATE)

- Confirm that episode is the 1st recurrence (not 2nd or more recurrences)
- Review all antibiotics & discontinue unless clearly indicated, or document reason for continuation
- Discontinue all PPIs unless clearly indicated or document reason for continuation
- Stop all anti-peristaltic and pro-motility agents
- **Metronidazole 500 mg PO/NG TID x 10-14 d ^**
- If diarrhea not resolving by Day 4-6, **change to vancomycin 125 mg PO/NG QID x 10-14d***
- If symptoms worsen,
  - Re-evaluate for CDI severity
  - Obtain ID or GI consult

SECOND OR FURTHER RECURRENCES

- **Vancomycin 125 mg PO/NG QID x 14 d***, then may consider vancomycin tapering over 4 weeks (e.g. vancomycin 125 mg BID x 7 days, then 125 mg once daily x 7 days, then 125 mg every 2 or 3 days for 2 weeks)† or pulse therapy
- Obtain ID or GI consult

Footnotes for algorithm

^ May change to Vancomycin if patient/resident intolerant to Metronidazole

++ Vancomycin IV is **not** effective for the treatment of CDI

☆ **In consultation** with Med Micro, ID, or GI specialist, fidaxomicin may be considered in:
- Mild or moderate disease not improving by day 4-6 **and** patient/resident allergic to oral vancomycin
- Severe disease and patient/resident allergic to oral vancomycin

In patients/resident unable to mount a WBC response >15,000/mm^3, an increasing WBC with pronounced left shift may also be considered in these criteria; threshold of >15,000/mm^3 is based on expert opinion.

* Vancomycin doses of 125-500 mg may be considered; appropriate dose has not been established in clinical trials. However, there is no evidence that doses higher than 125 mg. are more effective. Prolonging full-dose therapy beyond 14 days should be avoided as there is no evidence of effectiveness and it is likely to delay reconstitution of normal intestinal bacteria.

⦸ Physician assessment for perforation risk is required prior to rectal tube placement.

† Tapering or pulse therapy regimens may vary considerably, as clinical data are limited. Specialist referral should be obtained in patients with more than 2 recurrences.

Note:
- Metronidazole tapering or Metronidazole pulse therapy is NOT recommended
- Prophylactic treatment for patients on antibiotics who have previously had *C. difficile* is NOT recommended. Consider Infectious Diseases consult.

NOTE: This algorithm is considered current up to August 2015. Updated clinical guidelines are published by several societies including the Infectious Disease Society of America (IDSA) and the Society for Hospital Epidemiology of America (SHEA) http://www.idsociety.org/IDSA_Practice_Guidelines/. It is recommended that clinical practice guidelines such as these be consulted to obtain the most up-to-date CDI treatment recommendations.

Source: PICNet CDI Toolkit and Clinical Management Algorithm Feb 2013