

Letterkenny University Hospital - LUH Antimicrobial Prescribing Policy/Guidelines: Clostridioides difficile Infection (CDI)

Clostridioides difficile Infection (CDI)

- The following guidance applies to the treatment of patients with a clinical diagnosis of CDI and supportive microbiological evidence of CDI.
- Detection of C. difficile GDH +/- gene alone does not diagnose CDI. Clinical assessment is essential.** Asymptomatic colonisation can occur in 20-40% of hospitalised patients and does not require treatment.
- If CDI is diagnosed please see the **table below** for treatment of initial episode and first recurrence of CDI.
- The following regimens may be **recommended by Microbiology only** :
 - Regimen for [tapered pulsed oral Vancomycin](#) (see [Appendix 2](#) for more information)
 - Regimen for [intracolonic Vancomycin](#) (see [Appendix 2](#) for more information)
 - Reserve agent recommendation e.g. [Fidaxomicin](#)
- See [Appendix 2](#) for [CDI Patient information leaflet](#) and [CDI Management Practical Guide Summary](#) .

Infection	1 st Line Antibiotics	Comment
Non severe CDI Mildly symptomatic patients (positive test result less than 3 episodes of diarrhoea in 24 hours):	Initiate antimicrobial therapy with the fitting antibiotic: if possible and closely monitor the patient for 48 hours. C. difficile treatment should be initiated if any signs of clinical deterioration are observed.	General measures advised in the treatment of all patients with CDI: 1. Patients with potentially infectious diarrhoea (i.e. no clear alternative cause) should be isolated with Standard and Contact Precautions as soon as possible. 2. Stop unnecessary antimicrobial therapy (if possible). If an antibiotic is still essential, consider changing to one with a lower risk of causing CDI. It is preferable to use agents with as narrow spectrum as possible. Almost all antibiotics increase the risk of CDI but clindamycin, cephalosporins, ciprofloxacin (and other fluoroquinolones) and co-trimoxazole are well-documented as having the greatest risk. Please consider discussing with microbiologist. 3. Ensure adequate nutrition and replacement of fluid and electrolytes. 4. Avoid anti-motility medications e.g. loperamide, laxatives. 5. Review proton pump inhibitor use. 6. Ensure a stool chart is commenced and close monitoring of bowel motions.
Non severe CDI Positive test results and 3 or more episodes of diarrhoea in 24 hours :	1st line • Vancomycin [®] PO/NG 125mg every 6 hours for 10 days Alternative 1st line treatment option but must have prior approval by Consultant Microbiologist : • Fidaxomicin [®] PO 200mg every 12 hours for 10 days It can be considered as a treatment option for patients at high risk of recurrence supported by age over 65 years <u>plus</u> the presence of one or more of these additional risk factors: - healthcare associated CDI - prior hospitalisation in the last 3 months - use of concomitant antibiotics - PPI started during/after CDI diagnosis - prior CDI episode - immunocompromised or if severe underlying disease and/or renal insufficiency.	
Severe CDI Defined by one of the following: • fever, rigors i.e. core body temperature greater than 38.5°C. • marked leucocytosis, i.e. leucocyte count greater than 15 x 10 ⁹ /L. • rise in serum creatinine, i.e. more than 50% above the baseline. Additional supporting factors, when available are distension of the large intestine, peri-colonic fat stranding or colonic wall thickening at imaging.	Please discuss with Consultant Microbiologist. Early surgical opinion for all patients with severe CDI. Patients with severe CDI should be managed by a multidisciplinary team to include a clinical microbiologist, gastroenterologist, surgeon and pharmacist as needed. 1st line • Vancomycin [®] PO/NG 125mg every 6 hours for 10 days Alternative 1st line treatment option but must have prior approval by Consultant Microbiologist: • Fidaxomicin [®] PO 200mg every 12 hours for 10 days It can be considered as a treatment option for patients at high risk of recurrence supported by age over 65 years <u>plus</u> the presence of one or more of these additional risk factors: - healthcare associated CDI - prior hospitalisation in the last 3 months - use of concomitant antibiotics - PPI started during/after CDI diagnosis - prior CDI episode - immunocompromised or if severe underlying disease and/or renal insufficiency.	
Severe complicated/fulminant CDI Defined by the presence of one of the following attributed to CDI: • hypotension, septic shock, elevated serum lactate, ileus, toxic megacolon, bowel perforation or any fulminant course of disease (i.e. rapid deterioration of the patient).	Please discuss with Consultant Microbiologist. Early surgical opinion for all patients with severe CDI • Patients with severe CDI should be managed by a multidisciplinary team to include a clinical microbiologist, gastroenterologist, surgeon and pharmacist as needed. 1st line Vancomycin [®] PO/NG 500mg every 6 hours Plus Metronidazole IV 500mg every 8 hours 2nd line Other therapeutic options may be considered on a case-by-case basis and after multidisciplinary discussions. Please discuss with Consultant Microbiologist.	
First recurrence of CDI Recurrence is present when CDI recurs within 8 weeks after a previous episode, provided the symptoms from the previous episode resolved after completion of initial treatment.	Choice depends on first line treatment. Pulsed Vancomycin [®] PO may be an option Or Fidaxomicin [®] PO 200mg every 12 hours These options must be discussed with a Consultant microbiologist.	
Second or more recurrence of CDI	discuss with a Consultant Microbiologist.	

Prescribing notes: [Vancomycin](#) requires a [prescription](#) and is not routinely stocked in community pharmacies. Please contact ward and community pharmacy at least 24 hours prior to discharge to arrange supply if required.
Vancomycin: If a person has swallowed tablets or a nasogastric or PEG tube for enteral administration, vials of vancomycin powder for injection may be used to make an extemporaneous oral solution. See package insert or [Appendix 2](#) . Alternatively contact pharmacy for further advice. Vancomycin capsules are not routinely stocked in community pharmacies. Please contact ward and community pharmacy at least 24 hours prior to discharge to arrange supply if required.

References:

1. Health Protection Surveillance Centre. Surveillance, Diagnosis and Management of Clostridium difficile Infection in Ireland [June 2014](#)
2. V1.0 Clostridioides difficile treatment in hospital setting published on April 28th 2023 - HSE Antimicrobial Resistance & Infection Control (AMRIC). <https://www.hse.ie/eng/services/list/2/gp/antibiotic-prescribing/conditions-and-treatments/gastro/clostridium-difficile/>
3. Bishop et al "Management of Clostridioides difficile infection in adults and challenges in clinical practice: review and comparison of current IDSA/SHEA ESCMID and ASID guidelines." [J Antimicrob Chemother 2023; 78: 21-30](#)
4. Clinical Practice Guidelines for the Management of Clostridioides difficile Infection in Adults: 2021 Update by SHEA/IDSA
5. European Society of Clinical Microbiology and Infectious Diseases: 2021 update on the treatment guidance document for Clostridioides difficile infection in adults. [Clin Microbiol Infect 2021 Dec;27 Suppl 2:S1-S21. doi: 10.1016/j.cmi.2021.09.038. Epub 2021 Oct 20 .](#)
6. National Institute of Clinical Excellence Clostridioides difficile infection: Antimicrobial prescribing 2023 [\[NG199\] Published: 23 July 2021, Last reviewed 11 July 2024](#)