



# Clostridium difficile



Single  
Point  
Lesson 1

Clostridium difficile causes disease when the normal bacteria in the gut are disadvantaged, usually by someone taking antibiotics. This allows Clostridium difficile to grow to unusually high levels. It also allows the toxin that some strains of Clostridium difficile produce to reach levels where it attacks the intestines and causes mild to severe diarrhoea.

Clostridium difficile can lead to more serious infections of the intestines with severe inflammation of the bowel (pseudomembranous colitis).

## Symptoms

Profuse watery foul smelling diarrhoea  
Abdominal pain  
Fever  
May vary from mild diarrhoea to very severe illness e.g. colitis, perforated colon.

## Clostridium difficile potential toxin producers or PCR positive

Sometimes the lab detects Clostridium difficile which has the capability to produce toxins but it is not currently producing them at the time of testing. If the patient has diarrhoea then treatment is required. The patient is at higher risk of developing infection.

**Clostridium difficile toxin positive -**  
Clostridium difficile infection

## To prevent recurrence

- Review PPI where possible stop the PPI if it is no longer indicated.
- Be cautious when prescribing antibiotics in the future. Avoid unnecessary broad spectrum antibiotics. If antibiotics are required to treat other infections, try to choose low risk antibiotics.

## Risk factors

Antibiotics – risk greatest with broad spectrum antibiotics.  
Age – more common in elderly  
PPI's  
Immunosuppression

## Management of patients with Clostridium difficile

- If the patient is taking antibiotics they should be reviewed and stopped wherever possible.
- **Add an alert to the patients records**
- Prescribe antibiotics for treatment as per formulary:
- **Warrington** – Metronidazole 400mgs tds for 10-14 days. If the patient does not settle then contact the Consultant microbiologist.
- **St Helens** – Metronidazole 400mgs tds for 10 days. If the patient does not settle then treat with Vancomycin 125mg or 250mg qds for 10 days.
- **Halton** - Treat depending on which hospital the sample was taken.
- Take routine bloods if the patient doesn't improve.
- Ensure the patient is reviewed as improvement in symptoms should occur within 3-4 days. If no improvement speak with the Consultant Microbiologist or the Infection Control Team
- Consideration should be given to stopping/reviewing the need for PPIs in patients with or at high risk of CDI.
- Clostridium difficile may persist in the gut long after the infection has resolved. **There is no need to send clearance specimens.** As long as the patient is clear of diarrhoea for at least 48hrs they are not infectious.
- **Re-testing is also not recommended within a 28 day period.**
- **Recurrence** occurs in about 20% of patients after their 1<sup>st</sup> episode and 50-60% after 2<sup>nd</sup> episode.

## Who to Test and Taking Samples:

If a patient has diarrhoea (Bristol Stool Chart types 5-7) that is not clearly attributable to an underlying condition (e.g. inflammatory colitis, overflow) or therapy (e.g. laxatives, enteral feeding) then it is necessary to determine if this is due to CDI. Stools from all such symptomatic patients should be collected as early as possible, given that the results of testing may be used to minimise Clostridium difficile transmission risk

Assist the Infection Control Team with a Root Cause Analysis for your patient and return the CDT gathering information tool to the team within **7 days**. Your help with this is appreciated.

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