

Algorithm 1: Treatment of first episode of CDI in adultsⁱ

Treatment of CDI should be initiated based on **assessment of symptoms** and **severity of disease** while taking into account individual **risk factors** of the patient (II).

Severity markers:

- Temperature >38.5°C.
- Suspicion of PMC, toxic megacolon, ileus.
- Evidence of severe colitis in CT scan/Xray.
- WBC >15 cells x 10⁹/L.
- Acute rising serum creatinine >1.5 x baseline.

Patient has **no** severity markers:

- Treat with **oral metronidazole 400-500 mg three times a day for 10 days (IA)**.
- Rehydrate patient.

Daily assessment of patient with **mild to moderate** disease:

- Observe bowel movement, symptoms (e.g. WBC, fever and hypotension), nutrition and fluid balance and for signs of increasing severity (II).
- If condition does not improve after five days of treatment with metronidazole or worsens at any time, patient should be switched to treatment with vancomycin (125 mg four times a day for 10 days) (II).
- If oral route not available: metronidazole i.v. 500 mg **three times a day** 10 days (IB).
- If after 10 days treatment, diarrhoea still persists, seek specialist advice (II).

Patient has **one** severity marker:

- Treat with **oral vancomycin 125 mg four times a day for 10 days (IA)**.
- Rehydrate patient.
- **Surgical consultation** should be obtained on all patients with life threatening disease, i.e. if any one of the following: admission to ICU for CDI; hypotension with or without required use of vasopressors; ileus or significant abdominal distension; mental status changes, WBC ≥ 35 cells x 10⁹/L or < 2 cells x 10⁹/L; serum lactate >2.2 mmol/l; end organ failure (mechanical ventilation, renal failure, etc (IB).
- If oral route is not available or ileus is detected, treat with 500 mg metronidazole i.v. **three times a day for 10 days** plus vancomycin 500 mg four times a day (intracolonic or nasogastric) until ileus is resolved (II).

Daily assessment of patient with **severe** disease:

- Observe bowel movement, symptoms (e.g. WBC and hypotension), nutrition and fluid balance and for signs of increasing severity (II).
- Supportive care: intravenous fluid resuscitation, electrolyte replacement, and pharmacological venous thromboembolism prophylaxis. In the absence of ileus or significant abdominal distension, oral or enteral feeding should be continued (II).
- Gastroenterology and microbiology consultations. CT scanning/abdominal X-ray; consider PMC, toxic megacolon, ileus or perforation.

i For treatment of mild to moderate CDI in children please refer to: <https://bnfc.nice.org.uk/drug/metronidazole.html#indicationsAndDoses>.

For treatment of severe and life threatening CDI in children please refer to: <https://bnfc.nice.org.uk/drug/vancomycin.html#indicationsAndDoses>.