Algorithm 2: Treatment of first recurrence of CDI in adults[ii]

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.
- Colonic dilatation in CT scan/abdominal X-ray >6 cm.
- WBC >15 cells x 10^9L.
- Acute rising serum creatinine >1.5 x baseline.

Patient has no severity markers:

- Treat with **oral vancomycin 125 mg four times a day for 10 days (IB), or oral fidaxomicin 200 mg twice daily for 10 days** (on advice of local microbiologists or specialists in infectious diseases (II)).
- 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.
- If condition does not improve after five days, seek specialist advice (II).

Patient has one severity marker:

- Treat with **oral vancomycin 125 mg four times a day for 10 days** (IA). Consider treating severe first recurrence with **oral fidaxomicin 200 mg two times per day for 10 days** only on advice of local microbiologists or specialists in infectious diseases (II).
- 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 10^9/L or <2 cells x 10^9/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. t**hree 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.

ii 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.