Cambridgeshire & Peterborough Integrated Care System

NHS Cambridgeshire & Peterborough

Management of C. Difficile Infection (CDI): First Episode

1. Suspected CDI

If no features of toxic megacolon:

Vancomycin 125mg orally four times a day until C. difficile toxin result known.

- Discontinue non-CDI antibiotics and proton pump inhibitor if possible.
- Review C. difficile toxin results in 24 hours and treat according to result.
- If C. difficile toxin negative: STOP vancomycin.

2. Toxin negative (equivocal result)

If no features of toxic megacolon/colitis:

If no further diarrhoea, or non-infective causes of diarrhoea identified:

- STOP vancomycin.
- Monitor for diarrhoea closely.

If diarrhoea persists and no other cause of diarrhoea is found:

- Send repeat sample.
- Treat as 'suspected C. difficile infection'.
- If repeat sample is equivocal, consider continuing the vancomycin 125mg orally four times a day for 10 days (14 days if slow to respond).

3. Toxin positive

If no features of toxic megacolon:

Vancomycin 125mg orally four times a day for 10 to 14 days **or** Fidaxomicin 200mg orally twice a day for 10 days (reserved for those in hospital at high risk of recurrence, e.g., on-going need for systemic antibiotics, immunosuppression, or other local parameters).

Are symptoms improving?

Diarrhoea should improve by 48 hours and resolve by 6th or 7th day of treatment.

- If yes, stop at day 10.
- If no, improvement or worsening symptoms at 48 hours:
    - Discontinue non-C. difficile infection antibiotics if not already done.
    - Review medicines with gastrointestinal activity or side effects (including enteral feeds).
    - Stop proton pump inhibitor (e.g., omeprazole) unless required acutely.
    - Contact locally agreed experts (e.g., microbiology) for assessment and advice.
    - Contact gastroenterology for consideration of faecal microbiota transplantation (FMT).
    - If ileus suspected, refer to toxic megacolon pathway.
    - If slow to respond but symptoms improving, stop at day 10 to 14.

4. Toxic megacolon

If ileus or toxic megacolon suspected:

- Prescribe:
  - vancomycin 500mg orally, four times a day.
    plus
  - metronidazole 500 mg intravenous, three times a day.
  - Give without delay.
- Contact microbiology and general surgery for assessment and advice.
- If no improvement or worsening symptoms, contact microbiology.

Escalation of therapy

The patient may require colectomy or intracolonic vancomycin (retention enema).

- NB: elevated blood lactate >5 mmol/L is associated with extremely poor prognosis.
- Refer to rapid response team/ICU for higher level monitoring.
- Intravenous immunoglobulin may be considered, especially if albumin levels decline further or if immunosuppressed. Prescribe a single dose of 400mg/kg (this may be repeated). Local approval must be sought.

NB Intracolonic vancomycin (retention enema)

Dose**:** 500 mg in 100–500 mL saline, 4 to 12-hourly.
Administration**:** use 18 gauge Foley catheter with 30 mL balloon inserted PR; instil vancomycin; clamp catheter for 60 minutes; deflate and remove.

Recurrent Episodes

1. First recurrence

Fidaxomicin 200mg orally twice a day for 10 days (if vancomycin was used during first episode) (on microbiology advice for primary care, please contact local microbiologist to discuss) **or** vancomycin 125mg orally four times a day for 14 days (if fidaxomicin was used during first episode).

2. Second and subsequent recurrence

- Refer to gastro for consideration of faecal transplant (FMT).
- If not suitable for faecal transplant prescribe:
    - Vancomycin (on microbiology advice for primary care, please contact local microbiologist to discuss) oral solution 250mg orally six hourly, for 14 days followed by a six-week tapering dose of vancomycin:
        - 250mg orally six hourly for seven days.
        - 125 mg orally six hourly for seven days.
        - 125 mg orally 12-hourly for seven days.
        - 125 mg orally once daily for seven days.
        - 125 mg every other day for seven days.
        - 125 mg every third day for 14 days then **stop.**

Swallowing difficulties/nasogastric administration

- Vancomycin vials should be reconstituted with 30mL water and administered orally for all inpatients.
- This is a licensed method of administration for most vancomycin powder formulations.
- The taste can be improved by adding common flavouring syrups or squash at the time of administration.
- The capsule formulation is reserved for prescribing at the point of discharge (outpatient use) or in community.

Abbreviations

CDI: C. difficile infection
CDT: C. difficile toxin
FMT: faecal microbiota transplantation
ID: infectious diseases
PR: per rectum

Document management

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