Clostridium *difficile* Infection: How to Deal with the Problem

CDI in the Community

- All cases of diarrhoea (Type 5-7 Bristol Stool Chart / liquid stool that takes the shape of the container) among people in the community aged 2 years and above should be investigated for CDI unless there are good clinical or epidemiological reasons not to.

- Clinicians (doctors and nurses) should apply the following mnemonic protocol (**SIGHT**) when managing suspected potentially infectious diarrhoea:

S	**S**uspect that a case may be infective where there is no clear alternative cause for diarrhoea
I	**I**solate the patient and consult with the infection Prevention Control Team (IPCT) while determining the cause of the diarrhoea
G	**G**loves and aprons must be used for all contacts with the patient and their environment
H	**H**and washing with soap and water should be carried out before and after each contact with the patient and the patient's environment
T	**T**est the stool for toxin, by sending a specimen immediately

- Patients should be monitored daily for frequency and severity of diarrhoea. If patient is in a care home advise home to use the Bristol Stool Chart.

- All antibiotics that are clearly not required should be stopped, as should other drugs that cause diarrhoea.

- **When CDI is identified follow Algorithm** – page 33 Clostridium *difficile* Infection: How to Deal with the Problem, DOH 2008

- Assess the severity of CDI each day

  Mild CDI is not associated with a raised WCC; typically associated with <3 stools of type 5-7 Bristol Stool Chart
  Moderate CDI is associated with a raised WCC that is <15x 10^9 /L; typically associated with 3-5 stools per day
  Severe CDI is associated with a WCC > 15x10^9/L or rising serum creatinine, or temp >38.5C or evidence of severe colitis. The number of stools may be a less reliable indicator of severity.
  Life Threatening CDI includes hypotension, partial or complete ileus or toxic megacolon.

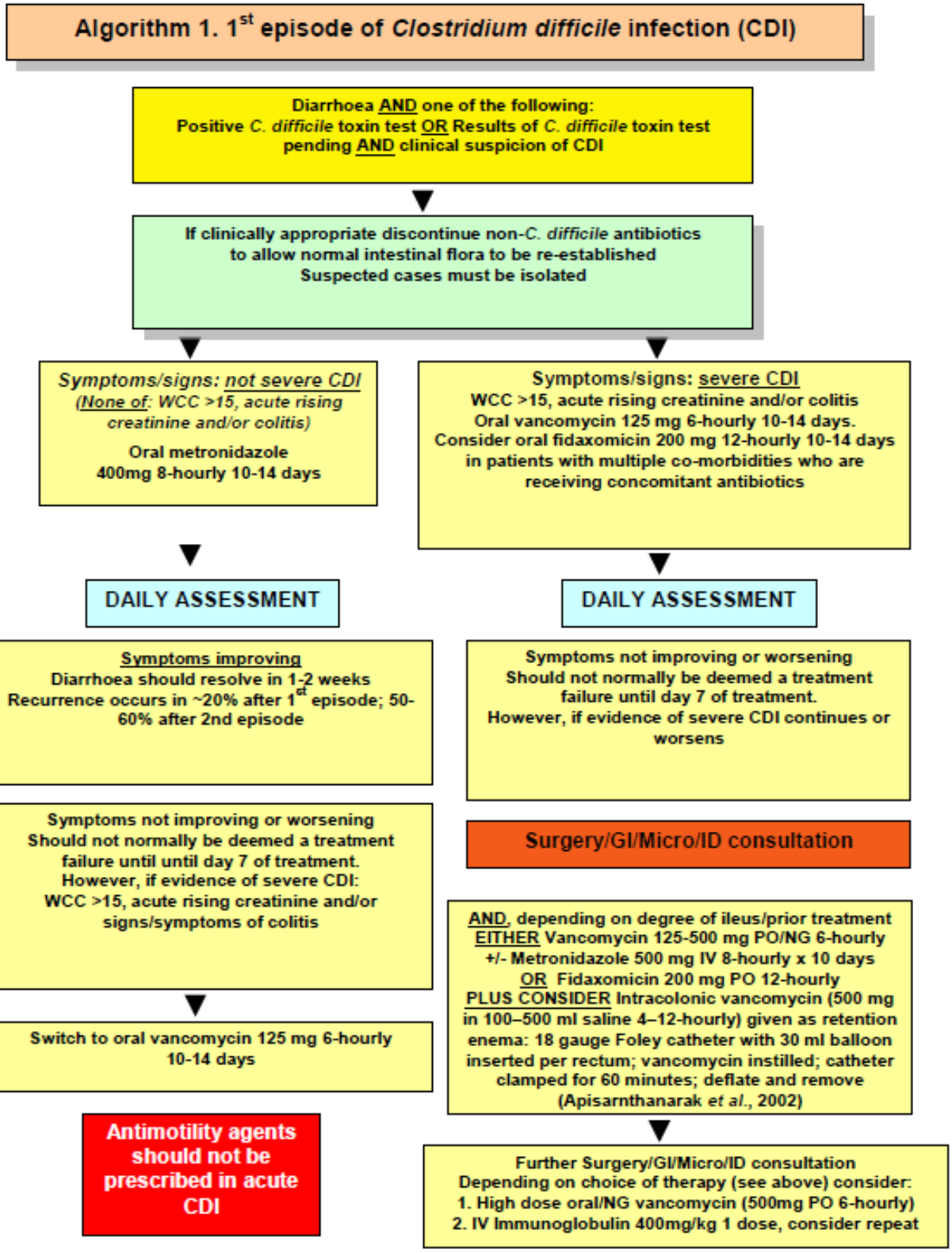
- The use of antimotility agents is contra indicated in suspected infective diarrhoea. For further guidance see page 17 Clostridium *difficile* Infection: How to Deal with the Problem, DOH 2008

- Following treatment for CDI a negative stool specimen is not required. A patient may carry the toxin in their gut for several months after recovery.

- Relapse occurs in up to 50% of cases.

- Issue patient with the Green CDI card. For more info www.northwest.nhs.uk/cdiff

4. Treatment algorithms



Algorithm 2 Recurrent *Clostridium difficile* infection (CDI)

Recurrent CDI occurs in ~15-30% of patients treated with metronidazole or vancomycin

Recurrence of diarrhoea (at least 3 consecutive type 5-7 stools) within ~30 days of a previous CDI episode AND positive *C. difficile* toxin test

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Must discontinue non- *C. difficile* antibiotics if at all possible to allow normal intestinal flora to be re-established
Review all drugs with gastrointestinal activity or side effects (stop PPIs unless required acutely)
Suspected cases must be isolated

▼

Symptoms/signs: not life-threatening CDI
Oral fidaxomicin 200 mg 12-hourly for 10-14 days
(efficacy of fidaxomicin in patients with multiple recurrences is unclear)
Depending on local cost-effectiveness decision making,
Oral vancomycin 125 mg 6-hourly 10-14 days is an alternative

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Daily Assessment
(include review of severity markers, fluid/electrolytes)

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Symptoms improving

Diarrhoea should resolve in 1-2 weeks

▼

IF MULTIPLE RECURRENCES ESPECIALLY IF EVIDENCE OF MALNUTRITION, WASTING, etc.

1. **Review ALL antibiotic and other drug therapy (consider stopping PPIs and/or other GI active drugs)**
2. **Consider supervised trial of anti-motility agents alone (no abdominal symptoms or signs of severe CDI)**

Also consider on discussion with microbiology:

3. **Fidaxomicin (if not received previously) 200 mg 12-hourly for 10-14 days**
4. **Vancomycin tapering/pulse therapy (4-6 week regimen)** (*Am J Gastroenterol 2002;97:1769-75*)
5. **IV immunoglobulin, especially if worsening albumin status** (*J Antimicrob Chemother 2004:53:882-4*)
6. **Donor stool transplant** (*Clin Infect Dis 2011;53:994-1002.Van Nood et al., NEJM 2013*)

Appendix 1: The Bristol Stool Form Scale

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces, a mushy stool
Type 7		Watery, no solid pieces ENTIRELY LIQUID

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Department of Health (2009) Clostridium *difficile* infection: How to deal with the problem. London: Department of Health http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_093220