Louth: Antimicrobial Guidelines - Louth Hospitals: Antimicrobial Guidelines: Gastrointestinal Infections

Indication

Acute Gastro-Enteritis

First Line Antimicrobials

Empiric antibiotics are not usually required pending culture results and may be harmful in cases of verocytotoxogenic *E. coli* (VTEC) infection.

Comments

If infectious diarrhoea is suspected or confirmed, inform Infection Prevention and Control Team (IPCT) and isolate patient with standard and contact precautions.

There are many potential underlying causes in a patient presenting with diarrhea – the following mnemonic (**SIGHT**) may be helpful in the initial management of diarrhea of unknown cause:

S – Suspect the diarrhea may be due to an infective cause

I – Isolate the patient

G – Gloves and aprons to be worn by healthcare workers in contact with the patient and his/her environment

H – Hand hygiene with soap and water is preferred (alcohol-based hand rubs are not effective against spores of *C. difficile*)

T – Test for faeces for C . *difficile* and enteric pathogens that cause infective diarrhoea.

Microbiological Investigations:

- Blood cultures if systemically unwell
- Send faeces sample for faeces culture, *C. difficile* test and Norovirus
- Discuss with Consultant Microbiologist whether additional investigations are indicated if patient immunocompromised or history of recent foreign travel.

Public Health notification is required for cases of salmonellosis, shigellosis, campylobacterioisis or VTEC infection.

Indication

Clostridioides difficile Infection (CDI)

Severe CDI is associated with any of:

- Clinical: fevers, rigors, abdominal pain
- Laboratory: WCC > 15 x 10^9 /L, rise in serum creatinine > 50% above baseline
- Endoscopic findings: Pseudomembraneous colitis

Severe AND complicated CDI implies severe disease with hypotension, shock, rising serum lactate, ileus or toxic megacolon.

First Line Antimicrobials

Mild to Moderate CDI:

Vancomycin 125mg QDS **PO**

Severe CDI:

Early surgical opinion

Vancomycin 125mg QDS **PO**

Severe complicated CDI:

Early surgical opinion

Vancomycin 500mg QDS **PO**

AND

Metronidazole 500mg TDS **IV**

Administration of ORAL vancomycin

For inpatients:

Vancomycin injection vials may be given ORALLY or ENTERALLY. Reconstitute vancomycin 500mg vial with 10mL WFI. Take required dose (125mg=2.5mL) and dilute dose further with approx. 30mL water before administration. If applicable, the remainder of the reconstituted vial may be stored in the fridge for up to 24 hours if labelled with the patient's name (single patient use only).

For patients to be discharged on ORAL vancomycin:

Oral vancomycin capsules are available in the community. A Hi-Tech prescription is no longer required. Prior to discharge, please inform patient's community pharmacy in advance to allow time for them to order oral vancomycin.

Comments

Always suspect CDI if:

- Age > 65 years
- Recent hospitalisation
- Recent antimicrobial therapy
- Past history of CDI

ALWAYS CONTACT Clinical Microbiologist for advice. Patients with CDI should be **REVIEWED DAILY** for signs of severe infection as above. Contact Clinical Microbiologist again if patient's symptoms fail to resolve after 48 hours of treatment.

If CDI is suspected or confirmed, inform IPCT and isolate patient with standard and contact precautions:

- Personal Protective Equipment (PPE), i.e. aprons and gloves, must be worn while caring for the patient
- WASH hands with SOAP AND WATER before and after each contact with the patient. Alcohol hand gels are NOT active against *C. difficile* spores.

Microbiological Investigations:

- Faeces sample for *C. difficile* PCR and toxin testing
- Do not send repeat faeces sample while on treatment or for test-of-cure. Faeces should only be sent for retesting in the event that a patient with recent CDI has new symptoms following resolution of diarrhoea.

If patient has CDI:

- **Review indication for other antimicrobials and discontinue if possible or change broad-spectrum to narrow-spectrum antimicrobials if necessary**
- Discontinue where appropriate: proton pump inhibitors, laxatives, prokinetic therapy (e.g. metoclopramide, erythromycin) and anti-motility agents
- Ensure adequate fluid and electrolyte replacement.

If patient has RECURRENT CDI or if fidaxomicin treatment is being considered, please contact Clinical Microbiologist for advice as fidaxomicin is a restricted agent.

A Root-Cause-Analysis Investigation will be undertaken for healthcare-associated severe CDI in conjunction with the IPCT.

N.B . Oral vancomycin is indicated only for CDI. It is active within the gastrointestinal tract and is not absorbed. It should never be used for systemic treatment. Drug levels are not required.

Duration of Treatment

10 days