NHS
Pan Mersey
Area Prescribing Committee

Avoidance of *Clostridium difficile* infection

GUIDELINE

- *Clostridium difficile* infection (CDI) is a leading cause of iatrogenic diarrhoea. Patients most at risk from CDI are the elderly, immunosuppressed and those with co-morbidities.
- Previous antimicrobial use is a major risk factor for CDI. Antimicrobials disrupt the normal microflora of the colon and allow overgrowth of CD.
- Broad spectrum antimicrobials particularly cephalosporins, clindamycin, quinolones and co-amoxiclav carry a greater risk of causing CDI [1]. However, use of any antibiotic can cause CDI.
- Risk of CDI is increased by long or repeated courses and use of multiple antimicrobials.
- There is evidence of a dose-dependent relationship between long term proton pump inhibitor (PPI) therapy and increased risk of CD-associated diarrhoea [2].

Prescribing recommendations

Antimicrobials [1]

- Only prescribe antimicrobials when there is clinical evidence (or strong suspicion) of bacterial infection or need for prophylaxis; the reason for administering antimicrobials should be clearly recorded in the clinical record.
- The focus should be around making a clear diagnosis with a clear plan and minimising the inappropriate use of any antimicrobial.
- Follow recommendations in Pan Mersey Antimicrobial Guide and Management of Common Infections in Primary Care or local Trust guidelines.
- Use narrow-spectrum antimicrobials for empirical treatment where possible.
- Review patient's previous history for CDI before prescribing any antimicrobial. If the patient has a previous history of CDI, seek specialist advice before prescribing antimicrobial if required.
- Restrict broad-spectrum antimicrobials to patients whose clinical and microbiological test results indicate use is necessary.
- Avoid using clindamycin and second and third-generation cephalosporins unless specifically clinically indicated, especially in the elderly and minimise use of quinolones.

Note: Patients who are not eligible for treatment under this statement may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. In this situation, follow locally defined processes.

- Stop antimicrobials started inappropriately or without sufficient evidence, and where microbiology results do not support the diagnosis of bacterial infection. Advice to 'complete the course' in such circumstances is no longer acceptable.
- Prescribing long term antimicrobials for urinary tract infection prophylaxis in elderly patients should be done in line with current primary care guidelines and continually assessed for risk versus benefit.

Proton Pump Inhibitors [3]

There is overuse of PPIs and evidence suggests that 25% - 70% of adult patients taking these drugs have no appropriate indication [4]. Minimise use where possible by:

- Review medications for possible causes of dyspepsia, e.g. calcium antagonists, nitrates, theophylline, bisphosphonates, steroids and NSAIDs, and stop or reduce dosage of these where possible.
- Offer lifestyle advice, i.e. healthy eating, weight reduction and smoking cessation.
- Advise avoid known precipitants of dyspepsia, e.g.: smoking, alcohol, coffee, chocolate and fatty foods.
- Recommend a raised head of bed and having main meal well before bedtime.
- For those requiring long-term management of dyspepsia, reduce the dose of lansoprazole or omeprazole in a step-wise fashion by using the lowest effective dose or by trying 'as-needed' use when appropriate, consider stepping down to H2-receptor antagonist or return to self-treatment with antacid and/or alginate therapy (unless there is an underlying condition or co-medication that needs continuing treatment).
- Patients discharged from hospital should not have PPI added on discharge letter without clear indication.

References

1. NICE Evidence summary [ESMPB1] Clostridium difficile infection: risk with broad-spectrum antibiotics March 2015
2. Specialist Pharmacy Service. Clostridium difficile infection – is use of proton pump inhibitors a risk factor? Updated December 2018
3. NICE Clinical Guideline 184. Dyspepsia and gastro-oesophageal reflux disease. Updated October 2019.
4. Forgacs I et al. Overprescribing proton pump inhibitors, BMJ 2008;336:2-3