Medicines for the treatment of dyspepsia and peptic ulcer disease

This series continues with a closer look at the types of questions that need to be asked when preparing for and conducting a medication review for specific medicines classes. In this article David Alldred and Duncan Petty focus on acid-suppressing medicines

Background

In previous articles we have looked at the underpinning skills needed to perform medication review and medicine use review.[1–4] A clinical medication review should be a holistic review of all the patient's medicines and medicine needs and the questions listed in figure 1 should be fully considered.

Preparation for a medicine review involves data gathering. Although there are four sources of data (the prescription, the medical record, the patient and the medicines) the starting point is reviewing the medical record (a level 2 review) to answers questions about each prescribed medicine. The aim of this article and future articles in this series is to look at questions that should be asked about each type of medicine.

The questions are aimed at conducting medicine reviews for the management of individual groups of medicines prescribed for long-term conditions in adults. The questions are designed as a checklist to act as an aide-mémoire. Wherever possible, evidence is derived from NICE guidelines, SIGN guidelines, National Service Frameworks or other nationally recognised guidance. These checklists are based on our experience and are not intended to be exhaustive. You should also be familiar with the basic therapeutics of each medicine — such as indications, doses, interactions and so on as outlined in the *British National Formulary* and the Summary of Product Characteristics when necessary. You may have additional questions that you may like to use, such as reminders about a local formulary or guideline choice of medicines.

When asking these questions you may find an answer in the clinical record, but often the question will remain unanswered and the patient will need to be consulted. Patients must also be interviewed to explain the reasons for changing medicines and to gain their agreement to this. These questions should therefore act as prompts for a level 2 review (review of the medical record) before the patient is seen.

Aim of treatment

It is always important when starting a new medicine or reviewing a repeat medicine to have a clear idea of the intended outcome. The aim of treatment for patients who are prescribed repeat prescriptions of acid-suppressing medicines is to reduce dyspep-

Patient's views and preferences:

- ☐ Does the patient understand the purpose of the medicine?
- ☐ Does the patient have any information needs about their condition and its treatment?
- ☐ Does the patient want to take the medicine?
- ☐ Are the prescription directions clear and practical?

Optimising the treatment regimen:

- ☐ Is the medicine still needed?
- ☐ Is it working?
- ☐ Is the dosage evidence-based?
- ☐ Is it the best current treatment?
- ☐ Is the treatment in line with most recent, authorative guidelines?
- ☐ Does the patient have any under-treated conditions?
- ☐ Does the patient have any untreated problems?

Identifying problems:

- ☐ Are the medicines being ordered and are they being taken?
- ☐ Is the patient able to take it?
- ☐ Is the medicine interacting with other medicines?
- ☐ Is the medicine contraindicated?
- ☐ Are there any adverse drug reactions (ADRs), either reported by the patient or evident from tests?

Monitoring and tests:

- ☐ Are any tests due to assess efficacy or ADRs?
- ☐ If so, does the patient know how and when to have these tests?
- ☐ Have you set up a fail-safe method to prevent continuing treatment without monitoring of potentially hazardous medicines?

Figure 1: General issues to consider in a medication review

sia symptoms, thereby improving quality of life. Short courses of these medicines are also used to cure peptic ulcer disease. By posing and answering the following questions you will have a good understanding of whether the aims of treatment are being met.

Is there a documented indication?

Indications will usually fall into one of four categories and it is important to know what the indication is for the patient you are reviewing, because the treatment might be different for each. For dyspepsia treatments the following indications should be looked for:

- Gastro–oesophageal reflux disease (GORD)
- Peptic ulcer disease — gastric or duodenal ulcer
- Non-ulcer dyspepsia — here tests are performed and no medical cause for the dyspepsia is found[5]
- Non-steroidal anti-inflammatory drug (NSAID) cover — to allow the continued use of a NSAID
- No documented indication.

Are other medicines a possible cause of dyspepsia?

Since the review is focusing on medicines, any possible medicine-induced disease or illness should be considered. Medicines that may cause dyspepsia include NSAIDs, corticosteroids, calcium channel blockers, nitrates, theophylline and bisphosphonates. Should any of these medicines be stopped or changed?

Does the patient have any 'alarm' symptoms?

Although it might be possible to identify some 'alarm' symptoms from the clinical record, it will usually be necessary to ask the patient if they have any of these symptoms. Alarm symptoms include:

- unexplained weight loss
- gastrointestinal bleeding
- difficulty in swallowing
- persistent vomiting
- iron-deficiency anaemia
- epigastric mass.

Patients with any of these symptoms should be referred for an urgent endoscopy (within two weeks).[6] NICE guidance recommends that routine endoscopic investigation of patients of any age presenting with dyspepsia and *without* alarm signs is not necessary. However, in patients aged 55 years and older with unexplained and persistent (in many cases this means of four to six weeks duration) recent-onset dyspepsia alone, an urgent referral for endoscopy should be made.[6]

Questions to ask when the diagnosis is known

Gastro-oesophageal reflux disease

After one or two months of full-dose proton pump inhibitor (PPI), can the dose be reduced to a maintenance dose, intermittent therapy, or stopped? For long-term therapy has a face-to-face review occurred in the last 12 months?[6]

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Peptic ulcer disease

Has peptic ulcer disease been proven by endoscopy? Has *H. pylori* been tested for? Has *H. pylori* eradication been offered? Is the patient now symptom free? If so, can acid-suppressing therapy now be stopped?

If the peptic ulcer was NSAID-induced, can the NSAID be changed to a simple analgesic, low-dose ibuprofen (400 mg tds) or a COX–II selective agent (with due attention to the risks and benefits)?[7]

If NSAID cover is required, is gastro-protection using a PPI or Misoprostol warranted?[8] Can the lowest licensed dose of PPI be offered? Encourage prn use of the NSAID or change to a COX–II selective drug where possible.

Non-ulcer dyspepsia (NUD)

Drugs are of limited effectiveness in non-ulcer dyspepsia (NUD).[5] Has *H. Pylori* been tested for and eradicated? If the patient is prescribed a PPI can the dose be reduced to a maintenance dose taken on a prn basis, or can the medication be 'stepped down' to an H_2-antagonist or antacid, or stopped?

No documented indication

Does the patient have 'alarm' symptoms or are they aged more than 55 years (see above)? If so, then endoscopy is recommended.[6] Can the patient be stepped down to a lower dose of PPI, an H_2-antagonist or antacid?

Life-style advice

Dyspepsia can be precipitated or exacerbated by lifestyle factors. Has the patient been offered advice on factors that may precipitate their dyspepsia, such as smoking, alcohol, chocolate, coffee, fatty foods, obesity, spicy food, lying flat in bed and having large meals close to bed time? ✣

Declaration of competing interests

The authors declare that they have no competing interests.

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