



A summary of prescribing recommendations from NICE guidance

Dyspepsia and gastro-oesophageal reflux disease

NICE CG184; 2014

This guideline covers the management of dyspepsia and GORD in adults (>18 years). It also covers endoscopic surveillance for adults with a diagnosis of Barrett's oesophagus, but does not include details on management of Barrett's oesophagus.

Definition of terms

GORD	gastro-oesophageal reflux disease
NSAIDs	non-steroidal anti-inflammatory drugs
GI	gastrointestinal
PPI	proton pump inhibitor
H ₂ RA	H ₂ receptor antagonist
<i>H. pylori</i>	<i>Helicobacter pylori</i>

See [NICE pathway: dyspepsia and GORD](#)

GORD refers to endoscopically determined oesophagitis or endoscopy-negative reflux disease.

Dyspepsia is defined broadly to include people with recurrent epigastric pain, heartburn or acid regurgitation, with or without bloating, nausea or vomiting.

Assessment

- ♦ Immediately (on the same day) refer people presenting with dyspepsia with significant acute GI bleeding to a specialist.
- ♦ Review medications for possible causes of dyspepsia e.g. calcium antagonists, nitrates, theophyllines, bisphosphonates, corticosteroids and NSAIDs.
- ♦ In people needing referral, suspend NSAID use.
- ♦ Consider the possibility of cardiac or biliary disease as part of the differential diagnosis.
- ♦ In people who have had a previous endoscopy and do not have any new alarm^a signs, consider continuing management according to previous endoscopic findings.
- ♦ Consider referral to a specialist service for people:
 - > of any age with GORD symptoms that are non-responsive to treatment or unexplained,
 - > with suspected GORD who are considering surgery,
 - > with *H. pylori* and persistent symptoms that have not responded to second-line eradication therapy.

Treatment and management

Common elements of care

- ♦ Community pharmacists should:
 - > offer initial and ongoing help for people with symptoms of dyspepsia. This includes advice about lifestyle changes, using over-the-counter medication, help with prescribed drugs and when to consult a GP,
 - > record adverse reactions to treatment and may participate in primary care medication review clinics.
- ♦ Offer lifestyle advice on healthy eating, weight reduction and smoking cessation.
- ♦ Advise people to avoid known precipitants associated with their dyspepsia. These include smoking, alcohol, coffee, chocolate, fatty foods and being overweight. Raising the head of the bed and not having a main meal before going to bed may help some people.

^a For more information about alarm signs see [Referral guidelines for suspected cancer](#) (NICE CG27) [update in progress; publication expected May 2015].

Uninvestigated dyspepsia

- ♦ Offer *H. pylori* 'test and treat' to people with dyspepsia.
- ♦ Leave a 2-week washout period after PPI use before testing for *H. pylori* with a breath test or a stool antigen test.
- ♦ Offer full-dose PPI therapy¹ for 4 weeks to people with dyspepsia.
- ♦ If symptoms return after initial treatment, offer a PPI at the lowest dose possible to control symptoms.
- ♦ Discuss with people how they can manage their own symptoms by using treatment 'as-needed'.
- ♦ If there is an inadequate response to a PPI, offer H₂RA therapy.

GORD

- ♦ Manage uninvestigated 'reflux-like' symptoms as uninvestigated dyspepsia.
- ♦ Offer a full-dose PPI¹ for 4 or 8 weeks.
- ♦ If symptoms return after initial treatment, offer a PPI at the lowest dose possible to control symptoms.
- ♦ Discuss with people how they can manage their own symptoms by using treatment 'as-needed'.
- ♦ If there is an inadequate response to a PPI, offer H₂RA therapy.
- ♦ People who have had dilatation of an oesophageal stricture should remain on long-term full-dose PPI¹ therapy.

Severe oesophagitis

- ♦ Offer a full-dose PPI² for 8 weeks to heal severe oesophagitis.
- ♦ If initial treatment fails: consider a higher dose of the initial PPI **OR** switching to another full-dose PPI **OR** switching to another high-dose PPI².
- ♦ For long-term maintenance treatment, offer a full-dose PPI².
- ♦ If treatment fails, carry out a clinical review. Consider switching to another PPI at full or high dose².

Surveillance for people with Barrett's oesophagus – see [NICE pathway](#)

- ♦ **Do NOT** routinely offer endoscopy to diagnose Barrett's oesophagus, but consider it if the person has GORD. Discuss the person's preferences and risk factors e.g. long duration of symptoms, increased frequency of symptoms, previous oesophagitis, previous hiatus hernia, oesophageal stricture/ulcers, or male gender.

Peptic ulcer disease

- ♦ For people who have tested positive for *H. pylori*: offer eradication therapy – see box 1.
- ♦ For people using NSAIDs:
 - > stop the NSAID if possible,
 - > offer full-dose PPI¹ or H₂RA therapy for 8 weeks and, if *H. pylori* is present, subsequently offer eradication therapy.

¹ see table 1 for PPI doses.

² see table 2 for PPI doses.

Dyspepsia and gastro-oesophageal reflux disease continued.....

NICE CG184: 2014

- ♦ For people who have tested negative for *H. pylori* who are not taking NSAIDs: offer full-dose PPI¹ or H₂RA therapy for 4 to 8 weeks.
- ♦ For people with gastric ulcer and *H. pylori*: offer repeat endoscopy 6 to 8 weeks after beginning treatment, depending on the size of the lesion.
- ♦ For people with peptic ulcer (gastric or duodenal) and *H. pylori*: offer retesting for *H. pylori* 6 to 8 weeks after beginning treatment, depending on the size of the lesion.
- ♦ Re-test for *H. pylori* using a carbon-13 urea breath test.
- ♦ For people who continue NSAIDs after a peptic ulcer has healed, discuss the potential harm from NSAIDs and regularly review the need for an NSAID (at least every 6 months). Offer a trial of use on an 'as-needed' basis. Consider reducing the dose, substituting an NSAID with paracetamol, or using an alternative analgesic or low-dose ibuprofen (1.2g daily).
- ♦ In people at high risk (previous ulceration) and for whom NSAID continuation is necessary, offer gastric protection or consider substitution with a cyclooxygenase-2-selective NSAID.
- ♦ In people with an unhealed ulcer, exclude non-adherence, malignancy, failure to detect *H. pylori*, inadvertent NSAID use, other ulcer-inducing medication and rare causes such as Zollinger-Ellison syndrome or Crohn's disease.
- ♦ If symptoms return after initial treatment, offer a PPI to be taken at the lowest dose possible to control symptoms. Discuss with people how they can manage their own symptoms by using treatment 'as-needed'.
- ♦ If there is an inadequate response to a PPI: offer H₂RA therapy.

Functional dyspepsia

- ♦ Manage endoscopically determined functional dyspepsia using initial treatment for *H. pylori* if present, followed by symptomatic management and periodic monitoring.
- ♦ Offer eradication therapy to people testing positive for *H. pylori* – see box 1.
- ♦ **Do NOT** routinely offer re-testing after eradication, although the information it provides may be valued by individual people.
- ♦ If *H. pylori* has been excluded and symptoms persist, offer either a low-dose PPI¹ or an H₂RA for 4 weeks.
- ♦ If symptoms continue or recur after initial treatment offer a PPI or H₂RA to be taken at the lowest dose possible to control symptoms.
- ♦ Discuss with people how they can manage their own symptoms by using treatment 'as-needed'.

Helicobacter pylori infection

Testing

- ♦ Test for *H. pylori* using a carbon-13 urea breath test, a stool antigen test, or laboratory-based serology where its performance has been locally validated.
- ♦ Re-test for *H. pylori* using a carbon-13 urea breath test.
- ♦ **Do NOT** use office-based serological tests for *H. pylori* because of their inadequate performance.

Laparoscopic fundoplication – see [NICE pathway](#)

¹ see table 1 for PPI doses.

³ see table 3 for PPI doses.

[§] some of these recommendations differ to other sources.

[#] all doses of PPI and antibiotics should be given twice daily.

^{*} see [Summary of Product Characteristics](#) for full prescribing information.

Box 1.

H. pylori eradication treatment[§]

First-line

- ♦ Choose a treatment regimen with the lowest acquisition cost and take into account previous exposure to clarithromycin or metronidazole.
- ♦ Offer people who test positive for *H. pylori* a 7-day, **twice-daily[#]** course of treatment with a PPI³ **AND**
 - > amoxicillin^{*}, **AND**
 - > clarithromycin^{*} **OR** metronidazole^{*}.
- ♦ People allergic to penicillin: offer a PPI³ **AND** clarithromycin **AND** metronidazole.
- ♦ People who are allergic to penicillin and have had previous exposure to clarithromycin: offer a PPI³, **AND**
 - > bismuth^{*}, **AND**
 - > metronidazole **AND** tetracycline.

Second-line

- ♦ People who still have symptoms after first-line treatment: offer a PPI³, **AND**
 - > amoxicillin, **AND**
 - > clarithromycin **OR** metronidazole (whichever was not used first-line).
- ♦ People who have had previous exposure to clarithromycin and metronidazole: offer a PPI³, **AND**
 - > amoxicillin, **AND**
 - > a quinolone e.g. ciprofloxacin^{*}, **OR** tetracycline^{*}.
- ♦ People who are allergic to penicillin (or who have not had previous exposure to a quinolone): offer a PPI³, **AND**
 - > metronidazole, **AND**
 - > levofloxacin^{*}.
- ♦ People allergic to penicillin and have had previous exposure to a quinolone: offer a PPI³, **AND**
 - > bismuth, **AND**
 - > metronidazole, **AND**
 - > tetracycline.
- ♦ Seek advice from a gastroenterologist if eradication of *H. pylori* is not successful with second-line treatment.

Prescribing

- ♦ When choosing a PPI, take into account the person's preference and clinical circumstances e.g. tolerability of the initial PPI, underlying health conditions and possible interactions with other drugs, and acquisition cost of the PPI.
- ♦ Encourage people who need long-term management of dyspepsia symptoms to reduce use of prescribed medication stepwise: by using the lowest effective dose, by trying 'as-needed' use when appropriate, and by returning to self-treatment with antacid and/or alginate therapy (unless there is an underlying condition or comedication that needs continuing treatment).
- ♦ Avoid long-term, frequent-dose, continuous antacid therapy as it only relieves symptoms in the short term rather than preventing them.
- ♦ Advise people that it may be appropriate for them to return to self-treatment with antacid and/or alginate therapy (either prescribed or purchased over-the-counter and taken as needed).

Review

- ♦ Offer people who need long-term management of dyspepsia symptoms an annual review of their condition.

Appendix: Dyspepsia and GORD

NICE CG184: 2014

Table 1. Doses for dyspepsia, GORD, peptic ulcer disease

Proton pump inhibitor	Full/standard dose	Low dose (on-demand dose)	Double dose
Esomeprazole	20mg once a day ^a	Not available	40mg once a day ^b
Lansoprazole	30mg once a day	15mg once a day	30mg twice a day ^c
Omeprazole	20mg once a day	10mg once a day ^c	40mg once a day
Pantoprazole	40mg once a day	20mg once a day	40mg twice a day ^c
Rabeprazole	20mg once a day	10mg once a day	20mg twice a day ^c

^a lower than the licensed starting dose for esomeprazole in GORD, which is 40mg, but considered to be dose-equivalent to other PPIs. In a meta-analysis of dose-related effects, NICE classed esomeprazole 20 mg as a full-dose equivalent to omeprazole 20mg.

^b 40mg is recommended as a double dose of esomeprazole because the 20mg dose is considered equivalent to omeprazole 20mg.

^c off-label dose for GORD.

Table 2. Doses for severe oesophagitis

Proton pump inhibitor	Full/standard dose	Low dose (on-demand dose)	High/double dose
Esomeprazole	40mg once a day ^d	20mg once a day ^d	40mg twice a day ^d
Lansoprazole	30mg once a day	15mg once a day	30mg twice a day ^c
Omeprazole	40mg once a day ^d	20mg once a day ^d	40mg twice a day ^d
Pantoprazole	40mg once a day	20mg once a day	40mg twice a day ^c
Rabeprazole	20mg once a day	10mg once a day	20mg twice a day ^c

^d change from the dose recommendation in 2004, specifically for severe oesophagitis, agreed by the guideline development group during the update of CG17.

^c off-label dose for GORD.

Table 3. Doses for *H. pylori* eradication therapy

Proton pump inhibitor	Dose
Esomeprazole	20mg twice daily
Lansoprazole	30mg twice daily
Omeprazole	20 to 40mg twice daily
Pantoprazole	40mg twice daily
Rabeprazole	20mg twice daily

Consult [Summary of Product Characteristics](#) for full prescribing information.