NHS
Scarborough and Ryedale
Vale of York
Clinical Commissioning Groups

Referral Support Service

Gastroenterology

GA05

Management of Dyspepsia in Primary Care and Referral for Endoscopy

This guidance is about the initial management of patients who present with dyspepsia symptoms and who have **not had previous gastroscopy**, or who had a **negative gastroscopy in the past** but have new or a change in symptoms. It consists of

- Definition
- What NICE mean by the terms 'Offer' and 'Consider'
- **Red Flag Symptoms**
  - Urgent (two week wait fast track) with Dyspepsia
- Management without red flag symptoms
  - Management of Dyspepsia of unidentified cause in patients under 55 and initial management of patients over 55
    - H.pylori testing and eradication
  - Management of Refractory or recurrent symptoms
    - H. pylori resting and second line eradication regimes
- Non-urgent, direct access for routine referral for endoscopy
  - Information to include in referral letter
- Patient information leaflets

Definition

The term **'dyspepsia'** is used to describe a complex of upper gastrointestinal tract symptoms which are typically present for **four or more weeks**, including upper abdominal pain or discomfort, heartburn, acid reflux, nausea and/or vomiting [NICE, 2014].

'Uninvestigated' dyspepsia describes symptoms in people who have not had an endoscopy.

If symptoms of heartburn and acid regurgitation predominate, then gastro-oesophageal reflux disease (GORD) is the more likely diagnosis.

Dyspepsia symptoms are estimated to occur in about **40% of the population each year but only a very few people are likely to have significant morbidity such as gastric cancer**, It is slightly more common in women than men. About 5% of the population will consult their GP each year. It is, therefore, neither practical nor desirable to refer patients routinely for endoscopic investigation. NICE commissioning tool recommends an annual benchmark endoscopy rate of 0.75%. Nationally about 1% of the population are referred for an endoscopy each year.

Upper Gastrointestinal Endoscopy or Gastroscopy is an examination of the upper digestive tract using an endoscope. Dyspepsia is defined broadly to include recurrent epigastric pain, heartburn or acid regurgitation, with or without bloating, nausea or vomiting.

Fast track endoscopy (within 2 weeks) is available to diagnose or exclude suspected cancer in specific groups of patients with high risk symptoms.

Routine endoscopy (within 6 weeks) is available to diagnose or exclude cancer and other disease in other groups of patients who are less likely to have cancer.

- Reported symptoms are a poor predictor of significant disease or underlying pathology. **The majority of patients with dyspepsia symptoms will not have cancer and should be managed in primary care.**
- Rapid endoscopic investigation of patients of any age, presenting with dyspepsia, but without alarm signs, **is not advocated by NICE**.
- Some very high risk patients will need admission to manage and investigate their symptoms.
- **Endoscopy is an invasive and unpleasant investigation and patients should only be offered it when there are alarm symptoms or recurrent symptoms that have not resolved with other management.**
- In frail patients with multi-morbidity consider the same management as younger patients, before subjecting them to endoscopy.

This guidance is based on NICE guidance: NICE (2015) *Suspected cancer: recognition and referral (NG12)* and https://cks.nice.org.uk/dyspepsia-unidentified-cause

The rationale for the local policy on indications for endoscopy, therefore, remains as set out by NICE in its advice on the potential benefits of commissioning an effective service for upper GI endoscopy.

- effective management of patients with dyspepsia in primary care, in line with NICE guidance on dyspepsia CG184, to ensure that patients receive the most appropriate and effective treatments, and that endoscopies are carried out only when necessary;
- referral for endoscopy is prioritised, especially for those with alarm symptoms detailed in NICE guidance on referral for suspected cancer NG12;
- reduction in unnecessary referrals – there is a small risk following upper GI endoscopy: in the UK one in 200 patients experience adverse events and the risk of mortality is one in 2000. However, the mortality for ambulatory patients attending an outpatient endoscopy service is much lower;
- optimising availability of endoscopy resources for appropriate cases;
- helping GP practices to manage secondary care and prescribing budgets more effectively in order to redirect resources into primary care, mental health and prevention.

What NICE mean by the terms ‘Offer’ and ‘Consider’

Some NICE recommendations are made with more certainty than others. NICE word their recommendations to reflect this. For example NICE use 'offer' to reflect a strong recommendation, usually where there is clear evidence of benefit. NICE use 'consider' to reflect a recommendation for which the evidence of benefit is less certain. See Making decisions using NICE guidelines.

Red Flag Symptoms

Urgent (two week wait, fast track) with Dyspepsia

In accordance with NICE guidance the CCGs will fund fast track (two week wait) referrals for direct access upper GI endoscopy to investigate dyspepsia **only** when there are **alarm or red flag** symptoms (as below), and when the referral is being made in order for the GP to exclude a diagnosis of cancer.

Patients should be offered gastroscopy when there are:

ALARM and RED FLAG symptoms in patients with dyspepsia

- Patients of any age with:
    - dysphagia

  OR

- Aged 55 years and older

  WITH (unintentional and unexplained) WEIGHT LOSS

  AND ANY of the following
    - Upper abdominal pain
    - Reflux
    - Dyspepsia

Immediate **(same day) specialist referral** should be made for dyspepsia with significant current gastrointestinal bleeding (decision on endoscopy will be by the examining specialist).

If there is possible obstructive jaundice refer to fast-track jaundice service – **phone hepatology today.**

Management without red flag symptoms

Management of Dyspepsia of unidentified cause in patients under 55 and initial management of patients over 55

Rapid endoscopic investigation of patients of any age, presenting with dyspepsia, but without alarm signs, **is not advocated by NICE**.

- **Assess for any alarm symptoms** such as
    - Treatment-resistant dyspepsia or
    - Upper abdominal pain with low haemoglobin levels or
    - Raised platelet count with any of the following:
        - Nausea
        - Vomiting
        - Weight loss
        - Reflux
        - Dyspepsia
        - Upper abdominal pain, or
    - Nausea or vomiting with any of the following:
        - Weight loss
        - Reflux
        - Dyspepsia
        - Upper abdominal pain

  These may suggest a complication or other serious underlying pathology, and manage appropriately.

- **Explain the pathophysiology** and offer written information and advice on the symptoms, self-care, and management options for dyspepsia
- **Review medication**:
    - Ask about any over-the-counter medication such as antacids and/or alginates that have been tried for symptom relief.
        - Advise that self-treatment with an antacid and/or alginate may be used for short-term symptom control, but long-term, continuous use is not recommended.
    - **Many medications can cause dyspepsia - consider a trial without them where possible. These are some commonly used ones. Check the BNF if your patient is on other medication that may be causing dyspepsia side effects.**
        - **calcium antagonist**
        - **digoxin**
        - **nitrates**
        - **bisphosphonates**
        - **steroids**
        - **non-steroidal anti-inflammatory drugs (NSAIDs)**
        - **iron**
        - **codeine and opiates**
        - **metformin**
        - **theophyllines**
    - Consider Proton Pump Inhibitors (PPI) cover if it is not possible to stop drugs that may be contributing to symptoms
    - Ask about the number and duration of any previous courses of antibiotics, which may affect the choice of *Helicobacter pylori* eradication regimen used (if needed).
- **Strongly encourage on lifestyle measures** that may improve symptoms:
    - **Lose weight** if they are overweight or obese. See the CKS topic on Obesity for more information and local information on the RSS
    - **Healthy eating** such as eating smaller meals and eating their evening meal 3–4 hours before going to bed, if possible.
    - **Avoid** any **trigger foods**, such as coffee, chocolate, tomatoes, fatty or spicy foods.
    - **Smoking cessation** See the CKS topic on Smoking cessation for more information.
    - Suggest a **trial of antacid/alginate** eg Peptac although bear in mind that NICE's recommendation on self-treating with antacid and/or alginate therapy is extrapolated from NICE recommendations on the management of gastro-oesophageal reflux disease (GORD), as there is evidence that antacids are no more effective than placebo in treating dyspepsia symptoms [NICE, 2014].
    - **Minimise alcohol** intake See the CKS topic on Alcohol - problem drinking for more information
    - Trying raising the head of the bed
- **Assess for stress, anxiety, and depression** which may worsen symptoms. Encourage relaxation strategies, consider referral for psychological therapies, and manage depression symptoms if needed. See the CKS topics on Generalized anxiety disorder and Depression for more information.

- **Offer the following strategies to manage un-investigated dyspepsia symptoms**, depending on clinical judgement:
    - **Blood tests** - FBC, coeliac serology, CRP, LFT and ferritin if patient anaemic. Add in GGT if alcohol consumption is high (or thought to be)
        - Investigate and manage anaemia according to NICE and local guidance
        - Investigate abnormalities of LFTs according to NICE and local guidance.
        - Refer patients with positive coeliac serology according to local guidance.

      Helicobacter pylori

      Public Health England state the prevalence of H. pylori is less than 15% in many areas of the UK. It tends to be lower in affluent areas. The local lab positivity rate for Helicobacter faecal antigen testing across Scarborough and York is 17%.

      Test for *Helicobacter pylori* infection if the person's status is not known or uncertain. Tests cost £13 for the lab to process. It is good to do this at presentation, before treatment is started. If this is not possible it is important to ensure the test is not performed within 2 weeks of taking a proton pump inhibitor (PPI) or within 4 weeks of antibiotic therapy as these drugs invalidates the result. Please don't risk doing invalid tests.

        - NICE say: Testing for H. pylori infection and treating a positive result is more clinically effective, and more cost-effective, at reducing dyspepsia symptoms after one year than empirical acid suppression therapy, in people with confirmed H. pylori infection. NICE suggests this may be due to the fact that eradication therapy can prevent the recurrence of peptic ulcer disease and prevent the formation of peptic ulcers in people who are at risk of developing them, which reduces the need for maintenance acid suppression therapy.
        - NICE notes that PHE recommends offering a one month course of PPI therapy first, before testing for H. pylori, for most people in the UK [PHE, 2016]. The prevalence of H. pylori is less than 15% in many areas of the UK, so a trial of PPI is a sensible first-line approach for most people. This takes into account the fact that the positive predictive value of the H. pylori test declines with decreasing H. pylori prevalence.
        - If the likelihood of H. pylori infection is more than 20%, a person lives in a known high-risk area, or the person is elderly or of North African ethnicity, then H. pylori testing should be performed first.
        - If the tests for *H. pylori* infection are positive prescribe first-line eradication therapy.
        - If a person tests positive for H. pylori, offer a 7-day triple therapy regimen of:
        - A PPI twice-daily and amoxicillin 1 g twice-daily and either clarithromycin 500 mg twice-daily or metronidazole 400 mg twice-daily.
        - If the person is allergic to penicillin, offer clarithromycin 500 mg twice-daily and metronidazole 400 mg twice-daily. Note: the British National Formulary (BNF) recommends using clarithromycin 250 mg twice-daily for this regimen.

- If the person is allergic to penicillin and has had previous exposure to clarithromycin, offer a 7–10 day triple therapy regimen of use metronidazole 400 mg twice-daily and levofloxacin 250 mg twice-daily.
- Eradication rates of 80–85% were achieved using optimal triple therapies

Whilst waiting for a H. pylori result prescribe a full-dose proton pump inhibitor (PPI) for 1 month — see the section on Proton pump inhibitors in Prescribing information for more information

- NICE and Public Health England (PHE) recommend the use of the following PPI doses. Locally first line generic Lansoprazole 30 mg (without specific manufacturer*) is the first treatment of choice (Lansoprazole-Fast tabs is not generic PPI and is more expensive without evidence of great benefit). * for example, in May 2019 a prescription for Lansoprazole 30mg (Consilient Health Ltd) with the manufacturer attached to the drug name will cost the NHS £23.63 as opposed to the generic price of £1.01

- Over time the likelihood of having a missed cancer, in a stable patient on a PPI decreases even in patients who have never had an endoscopy. A decision not to endoscope should be a joint one with patients and encourage all lifestyle changes that will reduce the need for medication
- Offer patients requiring long-term treatment for dyspepsia an annual review and encourage them to try stepping down to effective lowest dose or stopping treatment and trying as-required use when appropriate. Consider which lifestyle changes they could still implement. Advise people it may be appropriate for them to return to self treatment with an antacid and/or alginate therapy (either prescribed or purchased over the counter and taken as needed) See link.

- Advise patients to **arrange a follow-up appointment if there are refractory or recurrent symptoms** following initial management. Be careful not to put PPIs on repeat without a review after initial treatment.

Management of Refractory or recurrent symptoms

- **Assess for any new alarm symptoms** which may suggest a complication or other serious underlying pathology, and manage appropriately.
- For people with persistent or recurrent dyspepsia symptoms despite initial management:
  - Consider whether an alternative diagnosis, such as IBS, cardiac or hepatobiliary disease, may be contributing to symptoms. Consider the need for a trial of antispasmodics, an ECG or an USS.
  - Check the person's adherence to initial management and **reinforce lifestyle advice**.
  - Consider alternative acid suppression therapy with a histamine (H_2)-receptor antagonist (H_2RA). See the section on H2-receptor antagonists in Prescribing information for more information.
  - Consider the need for long-term acid suppression therapy if symptoms have previously responded.
  - The MHRA advised in 2012: For patients expected to be on prolonged treatment, and especially for those who take PPIs with digoxin or drugs that may cause hypomagnesaemia (eg, diuretics), healthcare professionals should consider measuring magnesium levels before starting PPI treatment and repeat measurements periodically during treatment.

- If the person is taking a nonsteroidal anti-inflammatory drug (NSAID) or aspirin and is unable to stop the drug, advise on:
    - Reducing the NSAID dose, if possible, and offering long-term gastroprotection with acid suppression therapy.
    - Switching to an alternative to a NSAID, such as paracetamol or a cyclo-oxygenase (COX)-2 inhibitor, if appropriate. See the CKS topic on NSAIDs - prescribing issues for more information.
    - Switching to an alternative antiplatelet drug, if appropriate. See the CKS topic on Antiplatelet treatment for more information.
- If the person has received first-line *Helicobacter pylori* eradication therapy, do not routinely offer *H. pylori* re-testing.
    - Consider offering re-testing for *H. pylori*, using clinical judgement, if:
        - There has been poor compliance to first-line eradication therapy, or the initial test was performed within 2 weeks of proton pump inhibitor (PPI) or 4 weeks of antibiotic therapy.
        - Aspirin or a NSAID is indicated, especially if there is a history of peptic ulcer disease. See the CKS topic on Dyspepsia - proven peptic ulcer for more information.
        - There is a family history of gastric malignancy.
        - There are severe, persistent, or recurrent symptoms.
        - The person requests re-testing (for example if there is anxiety about whether *H. pylori* has been eradicated).
        - Note if considering endoscopy *H. pylori* re-testing may be performed during endoscopic examination in secondary care.
- If *H. pylori* re-testing is indicated, arrange this at least four weeks (ideally 8 weeks) after initial eradication therapy.
    - Offer the stool antigen test (as NICE's first line recommendation of the carbon-13 urea breath test is not available locally) — ensure the person has not taken a PPI in the past 2 weeks, or antibiotics in the past 4 weeks.
    - If *H. pylori* re-testing is positive, prescribe second-line *H. pylori* eradication therapy. See the section on Second-line H. pylori eradication regimens for more information.
    - If a person has ongoing symptoms following first-line eradication and H. pylori re-testing is positive, offer a 7-day triple therapy regimen of a PPI twice-daily and amoxicillin 1 g twice-daily and either clarithromycin 500 mg twice-daily or metronidazole twice-daily 400 mg (whichever was not used first-line).
    - If the person has had previous exposure to clarithromycin and metronidazole, offer a 7–10 day triple therapy regimen of A PPI twice-daily and amoxicillin 1g twice-daily and either a quinolone such as levofloxacin 250 mg twice-daily or tetracycline hydrochloride 500 mg four times a day.
    - If the person is allergic to penicillin and has not had previous exposure to a quinolone, offer a 7–10 day triple therapy regimen of a PPI twice-daily and metronidazole 400 mg twice-daily and levofloxacin 250 mg twice-daily.
    - If the person is allergic to penicillin and has had previous exposure to a quinolone, offer a 7-day quadruple therapy regimen of a PPI twice-daily and tripotassium dicitratobismuthate 240 mg four times a day and metronidazole 400 mg twice-daily and tetracycline hydrochloride 500 mg four times a day.
- Offer people on long-term treatment an annual review of their symptoms and treatment, and encourage the person to:

- Step down or stop treatment, if possible and appropriate (if there is no co-morbidity or co-medication that requires long-term acid suppression therapy):
    - Use a PPI or H_2RA at the ***lowest effective dose*** to control symptoms.
    - Use a PPI or H_2RA ***as needed***, if possible and appropriate.
    - Consider self-treatment with antacid and/or alginate therapy, although this is not recommended for long-term or continuous use.
- The MHRA advised in 2012: For patients expected to be on prolonged treatment, and especially for those who take PPIs with digoxin or drugs that may cause hypomagnesaemia (eg, diuretics), healthcare professionals should consider measuring magnesium levels before starting PPI treatment and repeat measurements periodically during treatment.

- Advise the person to arrange a follow-up appointment if there are refractory or recurrent symptoms.

Non-urgent, direct access for routine referral for endoscopy

In accordance with NICE guidance clinicians *should consider* non-urgent direct access upper gastrointestinal endoscopy to assess for possible gastric or oesophageal cancer in people with

- A history of haematemesis (which is not current and where the patient is cardiovascularly stable)

- In people **aged 55 or over** with:
    - Treatment-resistant dyspepsia or
    - Upper abdominal pain with low haemoglobin levels or
    - Raised platelet count with any of the following:
        - Nausea
        - Vomiting
        - Weight loss
        - Reflux
        - Dyspepsia
        - Upper abdominal pain, or
    - Nausea or vomiting with any of the following:
        - Weight loss
        - Reflux
        - Dyspepsia
        - Upper abdominal pain

- Other patients who may need a non-urgent endoscopy include those with unexplained worsening of dyspepsia **AND a history of**
    - Barrett's oesophagus;
    - dysplasia (abnormal development of cells, tissues or structures in the body); or atrophic gastritis (pernicious anaemia);
    - intestinal metaplasia (the term applied to a change of one kind of tissue into another);
    - peptic ulcer (ulcer in the stomach or the duodenum) surgery more than 20 years ago.

- Arrange a referral for endoscopy and/or to a gastroenterologist, depending on clinical judgement, if:
    - There are refractory or recurrent symptoms **despite optimal management** in primary care.

        - If endoscopy is planned, ensure the person **stops any acid suppression therapy for at least two weeks before the procedure date, and suggest self-treatment with antacid and/or alginate therapy if needed**.
    - Treatment with a second-line *H. pylori* eradication regimen has been unsuccessful.
    - There are limited antibiotic options for *H. pylori* eradication therapy, due to hypersensitivity, known local high antibiotic resistance rates, or previous use of clarithromycin, metronidazole, and a quinolone.

Information to include in referral letter

The CCG will fund **non-urgent** upper GI endoscopy in line with NICE guidance for dyspepsia

Endoscopy can only be requested in patients without alarm or red flag symptoms ***only*** when the above guidance has been followed and information detailed below is included in the referral:

- Persistent clinically significant symptoms after
    - trial of over-the-counter medications;
    - lifestyle modifications;
    - review of NSAID/other prescribed medications; and NICE-advised proton pump inhibitors (e.g. Lansoprazole 30mg for at least 4 weeks),
    - H Pylori "test and treat",
    - Histamine 2 receptor antagonist (H2RA) or higher dose PPI for 4 weeks has been completed as per the **Dyspepsia pathway (Page 4).**

AND

- Blood tests - FBC, coeliac serology, CRP, LFT and GGT and ferritin if patient anaemic
- H pylori tests (together with results of eradication therapy), must be available or accessible at the hospital assessment.

.**AND**

Current BMI, Smoking Status and Weekly Alcohol intake

AND Patients have been given the local leaflet on gastroscopy
Patients have been informed they should stop acid suppression therapy (with PPI or H_2RA) at least two weeks before the test.
Patients have been informed that biopsies may be taken during the test and they should find out the results of these two weeks after they have been done.

Referral Forms **here**

Patient information leaflets/ PDAs

NHS leaflets
Indigestion
Gastritis
Gastroscopy

References

NICE CKS on Dyspepsia – unidentified cause October 2018
NICE CKS on Gastrointestinal tract (upper) cancers - recognition and referral November 2016