

- i Information
- R Referral
- N National info
- L Local info
- Note
- Primary care
- Secondary care

Digestive Diseases Centre
Summary Information Sheet

1 i

Care map information

2 i

Information resources for patients and carers

3 i

Updates to this care map

4 i

Duodenal ulcer present - medication review

5 i

Helicobacter pylori (H. pylori) test

6 i

H. pylori positive - give eradication therapy

7 i

Review

9 i

Inadequate symptom response or relapse - retest for H. pylori

12 i

Adequate symptom response - advise continuing self care and consider H. pylori retest

13 i

H. pylori positive - give second-line eradication therapy

16 i

H. pylori negative - symptom review

17 i

Review

19 i

Adequate symptom response - advise continuing self care and consider H. pylori retest

21 i

Inadequate symptom response/relapse - consider referral to specialist

22 i

Consider referral if patient remains H. pylori positive

24

Refer to specialist

23

H. pylori negative
Consider clinical decision making
Do not repeat endoscopy

8 i

History of NSAID or aspirin use

10

No NSAID or aspirin use

11

Discontinue NSAID and prescribe PPI for 6-8 weeks.

15 i

Proton pump inhibitor (PPI)

14 i

If symptoms persist consider referral to specialist

18 i

Refer to specialist

20

Duodenal Ulcer

Wakefield CCG > Gastroenterology > Duodenal Ulcer

1 Digestive Diseases Centre Summary Information Sheet

Quick info:

attach DDC summary sheet

2 Care map information

Quick info:

Scope:

- primary care assessment and management of dyspepsia in adults
- indications for referral for endoscopy
- specialist management

Out of scope:

- pregnancy-associated dyspepsia

Definition:

- dyspepsia is defined as [1]:
 - upper abdominal pain or discomfort
 - heartburn
 - acid reflux
 - nausea
 - vomiting
- present for at least 4 weeks [2]

References:

[1] National Institute for Health and Clinical Excellence (NICE). Dyspepsia: management of dyspepsia in adults in primary care. Clinical guideline 17. London: NICE; 2004.

[2] Contributors representing the Royal College of Physicians; 2011.

3 Information resources for patients and carers

Quick info:

Recommended resources for patients and carers, produced by organisations certified by [The Information Standard](#):

- '[Dyspepsia \(indigestion\)](http://www.bupa.co.uk)' (URL) from Bupa at <http://www.bupa.co.uk>
- '[Dyspepsia \(indigestion\)](http://www.patient.co.uk)' (PDF) from Patient UK at <http://www.patient.co.uk>
- '[Indigestion \(dyspepsia\) in adults: understanding NICE guidance – information for people with dyspepsia, their families and carers, and the public](http://www.nice.org.uk)' from National Institute for Health and Clinical Excellence (NICE) at <http://www.nice.org.uk>
- '[Healthtalkonline](http://www.healthtalkonline.org/)' (URL) from DIPEX at <http://www.healthtalkonline.org/>
- '[Non-ulcer \(functional\) dyspepsia](http://www.patient.co.uk)' (PDF) from Patient UK at <http://www.patient.co.uk>

For details on how these resources are identified, please see Map of Medicine's document on [Information Resources for Patients and Carers](#) (URL).

4 Updates to this care map

Quick info:

Date of publication: 31-Oct-2013

The clinical content of this care map has been accredited by the Royal College of Physicians (RCP).

Please see the care map's Provenance for additional information on references, accreditations from national clinical bodies, contributors, and the editorial methodology.

Date of publication: 31-Jul-2013

This care map has been updated to include information on investigation of biopsies in line with:

Duodenal Ulcer

Wakefield CCG > Gastroenterology > Duodenal Ulcer

- [7] Health Protection Agency (HPA). UK Standards for Microbiology Investigations: Investigation of Gastric Biopsies for *Helicobacter pylori*. London: HPA; 2012.

Information on eradication therapies has been added from:

- [12] Zullo A, De F, V, Hassan C et al. Modified sequential therapy regimens for *Helicobacter pylori* eradication: a systematic review. *Dig Liver Dis* 2013; 45: 18-22.
- [13] Di Caro S, Fini L, Daoud Y et al. Levofloxacin/amoxicillin-based schemes vs quadruple therapy for *Helicobacter pylori* eradication in second-line. *World J Gastroenterol* 2012; 18: 5669-78.

Please see the care map's Provenance for additional information on references, accreditations from national clinical bodies, contributors, and the editorial methodology.

5 Duodenal ulcer present - medication review

Quick info:

Review medication use in those found to have a duodenal ulcer on endoscopy [2]:

- chronic non-steroidal anti-inflammatory drug (NSAID) or aspirin use is an important risk factor for:
 - duodenal ulcer
 - ulcer haemorrhage
- reconsider the indications for prescription NSAID and aspirin use
- ask about over-the-counter NSAID and aspirin use
- discuss risks of continued use with patient
- try to discontinue NSAID and aspirin use
- consider discussing alternatives with relevant specialists depending on indications for NSAID or aspirin use, eg rheumatologist, cardiologist
- classification and features (possible ulcer or erosion) (**include clinical reference**)

Reference:

[2] Contributors representing the Royal College of Physicians; 2011.

6 *Helicobacter pylori* (*H. pylori*) test

Quick info:

Before testing for *Helicobacter pylori* (*H. pylori*), a two week washout period following proton pump inhibitor (PPI) use is necessary [1,4].

H. pylori can be detected using:

- stool antigen test [1,3]
- carbon-13 urea breath test [1,3]
- serology [1,3] – a positive result cannot differentiate between active or past infection [2]

References:

[1] National Institute for Health and Clinical Excellence (NICE). Dyspepsia: management of dyspepsia in adults in primary care. Clinical guideline 17. London: NICE; 2004.

[2] Contributors representing the Royal College of Physicians; 2011.

[3] Clinical Knowledge Summaries (CKS). Dyspepsia - proven non-ulcer. November 2012. Newcastle upon Tyne: CKS; 2012.

[4] Scottish Intercollegiate Guidelines Network (SIGN). Dyspepsia. A national clinical guideline. Publication no. 68. Edinburgh: SIGN; 2003.

7 *H. pylori* positive - give eradication therapy

Quick info:

Initial eradication therapy:

- check local information on rates of clarithromycin resistance – if information indicates resistant rates are higher than 20% [2]:
 - clarithromycin containing regimens should be avoided

Published: 17-Apr-2014 Valid until: 31-Mar-2017 Printed on: 09-Apr-2015 © Map of Medicine Ltd

This care map was published by Wakefield. A printed version of this document is not controlled so may not be up-to-date with the latest clinical information.

Duodenal Ulcer

Wakefield CCG > Gastroenterology > Duodenal Ulcer

- consider:
 - initial therapy with the quadruple regimen [8]
 - sequential therapy [12]
- triple therapy with 7 days of: [5]
 - PPI at healing dose twice per day
 - amoxicillin twice per day
 - clarithromycin twice per day [8]
- consider sequential therapy, eg [12]:
 - 5 days of PPI at healing dose plus amoxicillin twice per day; followed by
 - 5 days of PPI, clarithromycin, and tinidazole twice per day
- if patients are allergic to amoxicillin, initial therapy can be [8]:
 - triple therapy for 7 days consisting of:
 - PPI at healing dose twice per day
 - metronidazole twice per day – avoid alcohol during any treatment with metronidazole
 - clarithromycin twice per day
 - quadruple therapy [8]: Reserve this for eradication failure [6]
 - PPI at healing dose twice per day
 - tripotassium dicitratobismuthate four times per day
 - tetracycline four times per day
 - metronidazole four times per day

NB: Check British National Formulary (BNF) and local information for dosage [2].

References:

[2] Contributors representing the Royal College of Physicians; 2011.

[5] South West Yorkshire Area Prescribing Committee [Primary Care Antibiotics 2013 P15](#)

[6] BNF 66 Sept - Mar 2014 P51.

[8] McColl K. Helicobacter pylori infection. N Engl J Med 2010; 362: 1597-604.

[12] Zullo A, De F, V, Hassan C et al. Modified sequential therapy regimens for Helicobacter pylori eradication: a systematic review. Dig Liver Dis 2013; 45: 18-22.

8 H. pylori negative Consider clinical decision making Do not repeat endoscopy

Quick info:

Caution:

Could be a false negative (**include reference with guidance**)??

Only consider scoping with clinical presentation and in larger or bleeding ulcers (**include clinical reference**)

9 Review

Quick info:

Review upper gastrointestinal (GI) tract symptoms [2]:

- upper abdominal pain or discomfort [1]
- heartburn [1]
- acid reflux [1]
- nausea [1]
- vomiting [1]

References:

[1] National Institute for Health and Clinical Excellence (NICE). Dyspepsia: management of dyspepsia in adults in primary care. Clinical guideline 17. London: NICE; 2004.

[2] Contributors representing the Royal College of Physicians; 2011.

Published: 17-Apr-2014 Valid until: 31-Mar-2017 Printed on: 09-Apr-2015 © Map of Medicine Ltd

This care map was published by Wakefield. A printed version of this document is not controlled so may not be up-to-date with the latest clinical information.

Duodenal Ulcer

Wakefield CCG > Gastroenterology > Duodenal Ulcer

12 Inadequate symptom response or relapse - retest for *H. pylori*

Quick info:

Before testing for *H. pylori*, a 2 week washout period following PPI use is necessary [1,4].

To check whether *H. pylori* eradication therapy was successful, use a stool antigen pathway [1] (**need reference**)

References:

[1] National Institute for Health and Clinical Excellence (NICE). Dyspepsia: management of dyspepsia in adults in primary care. Clinical guideline 17. London: NICE; 2004.

[4] Scottish Intercollegiate Guidelines Network (SIGN). Dyspepsia. A national clinical guideline. Publication no. 68. Edinburgh: SIGN; 2003.

13 Adequate symptom response - advise continuing self care and consider *H. pylori* retest

Quick info:

Complete symptom resolution is a strong predictor of successful *H. pylori* eradication [2].

Advise patient to consult again if symptoms return despite these measures [2].

Reference:

[2] Contributors representing the Royal College of Physicians; 2011.

14 Proton pump inhibitor (PPI)

Quick info:

Prescribe PPI, eg [3]:

- lansoprazole capsules
- omeprazole capsules
- pantoprazole tablets
- rabeprazole tablets
- esomeprazole capsules/tablets

Reference:

[3] Clinical Knowledge Summaries (CKS). Dyspepsia - proven non-ulcer. November 2012. Newcastle upon Tyne: CKS; 2012.

15 Discontinue NSAID and prescribe PPI for 6-8 weeks.

Quick info:

Discontinue NSAIDs or aspirin use if appropriate and prescribe a PPI for 6-8 weeks [2], for example [3]:

- lansoprazole capsules
- omeprazole capsules
- pantoprazole tablets
- rabeprazole tablets
- esomeprazole capsules/tablets

Reference:

[2] Contributors representing the Royal College of Physicians; 2011.

[3] Clinical Knowledge Summaries (CKS). Dyspepsia - proven non-ulcer. November 2012. Newcastle upon Tyne: CKS; 2012.

16 *H. pylori* positive - give second-line eradication therapy

Quick info:

- Treatment failure usually indicates antibacterial resistance or poor compliance [5]

Second line treatment:

Duodenal Ulcer

Wakefield CCG > Gastroenterology > Duodenal Ulcer

- quadruple therapy consisting of 10 days treatment with [2,8]:
 - PPI at healing dose twice per day
 - tripotassium dicitratobismuthate four times per day
 - tetracycline four times per day
 - metronidazole four times per day
- 10 days treatment with levofloxacin/amoxicillin twice daily [13]

NB: Alcohol should be avoided during treatment with metronidazole due to the potential for reaction resembling the reaction to disulfiram with alcohol use [8].

References:

[2] Contributors representing the Royal College of Physicians; 2011.

[5] BNF 66 Sept - Mar 2014 P50

[8] McColl K. Helicobacter pylori infection. N Engl J Med 2010; 362: 1597-604.

[13] Di Caro S, Fini L, Daoud Y et al. Levofloxacin/amoxicillin-based schemes vs quadruple therapy for Helicobacter pylori eradication in second-line. World J Gastroenterol 2012; 18: 5669-78.

17 H. pylori negative - symptom review

Quick info:

Review symptoms and treat as reflux or functional dyspeptic symptoms [2].

Reference:

[2] Contributors representing the Royal College of Physicians; 2011.

18 If symptoms persist consider referral to specialist

Quick info:

Consider referral to specialist to [2]:

- perform further investigations
- provide guidance and support for lifestyle changes
- devise treatment plan to heal ulcer and control upper GI tract symptoms

Reference:

[2] Contributors representing the Royal College of Physicians; 2011.

19 Review

Quick info:

Review upper GI tract symptoms [2]:

- upper abdominal pain or discomfort [1]
- heartburn [1]
- acid reflux [1]
- nausea [1]
- vomiting [1]

References:

[1] National Institute for Health and Clinical Excellence (NICE). Dyspepsia: management of dyspepsia in adults in primary care. Clinical guideline 17. London: NICE; 2004.

[2] Contributors representing the Royal College of Physicians; 2011.

21 Adequate symptom response - advise continuing self care and consider H. pylori retest

Quick info:

Duodenal Ulcer

Wakefield CCG > Gastroenterology > Duodenal Ulcer

Complete symptom resolution is a strong predictor of successful *H. pylori* eradication [2].

Advise patient to consult again if symptoms return despite these measures [2].

Reference:

[2] Contributors representing the Royal College of Physicians; 2011.

22 Inadequate symptom response/relapse - consider referral to specialist

Quick info:

Consider referral to specialist to [2]:

- perform further investigations
- provide guidance and support for lifestyle changes
- devise treatment plan to heal ulcer and control upper GI tract symptoms

Reference:

[2] Contributors representing the Royal College of Physicians; 2011.

Duodenal Ulcer

Wakefield CCG > Gastroenterology > Duodenal Ulcer

Key Dates

Published: 17-Apr-2014, by Wakefield

Valid until: 31-Mar-2017