Helicobacter Pylori Treatment Guidelines

For use in primary and secondary care

Adapted from Public Health England recommendations ' Test and Treat for *Helicobacter pylori* (HP) in dyspepsia', updated in September 2019

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Which patients to test for Helicobacter Pylori?

- Patients with uncomplicated dyspepsia unresponsive to lifestyle change and antacids, following a single one month course of proton pump inhibitor (PPI), without alarm symptoms
    - A trial of PPI should usually be prescribed before testing, unless the likelihood of HP is higher than 20% (older people; people of North African ethnicity; those living in a known high risk area), in which case the patient should have a test for HP first, or in parallel with a course of PPI
- Patients with a history of gastric or duodenal ulcer/bleed who have not previously been tested
- Patients before taking NSAIDs, if they have a prior history of gastro-duodenal ulcers/bleeds
    - Both HP and NSAIDs are independent risk factors for peptic ulcers, so eradication will not remove all risk
- Patients with unexplained iron-deficiency anaemia, after negative endoscopic investigation has excluded gastric and colonic malignancy, and investigations have been carried out for other causes, including: cancer; idiopathic thrombocytopenic purpura; vitamin B12 deficiency

Who not to test for Helicobacter Pylori routinely?

- Patients with proven oesophagitis, or predominant symptoms of reflux, suggesting gastro-oesophageal reflux disease (GORD)

Which test to use for Helicobacter Pylori?

- Urea breath tests (UBTs) and stool antigen tests (SATs) are the preferred tests
    - UBT is more accurate but not widely available
    - Helicobacter stool antigen test is used first line in CHFT

A urease based test (CLO test) of gastric biopsies for histopathology can be carried out opportunistically the time of upper GI endoscopy if patients are already undergoing this test for other indications.

Serology (antibodies against Helicobacter) is not helpful- therefore DO NOT USE

DO NOT perform UBT or SAT within two weeks of PPI or four weeks of antibiotics as these drugs supress bacteria and can lead to <u>false negatives</u>

When should treatment for Helicobacter Pylori be given?

- All patients with positive HP
- If initial HP –ve, only retest if DU, GU, family history of cancer, MALToma, or if test was performed within two weeks of PPI, or four weeks of antibiotics

Treatment regimens for Helicobacter Pylori

- **FIRST LINE treatment**

No penicillin allergy	**Penicillin allergy**	**Duration**
PPI twice daily PLUS amoxicillin 1g BD PLUS either clarithromycin 500mg BD OR metronidazole 400mg BD	**PPI twice daily** PLUS clarithromycin 500mg BD PLUS metronidazole 400mg BD	**7 days**
If previous <u>Clarithromycin</u> exposure **PPI twice daily** PLUS bismuth subsalicylate 525mg QDS OR tripotassium dicitratobismuthate 240mg QDS PLUS tetracycline hydrochloride 500mg QDS PLUS metronidazole 400mg BD		**7 days**

- **SECOND LINE treatment**

No penicillin allergy	**Penicillin allergy**	**Duration**
PPI twice daily PLUS amoxicillin 1g BD PLUS second antibiotic not used	**PPI twice daily** PLUS metronidazole 400mg BD PLUS levofloxacin 250mg BD	**7 days**

in first line, either clarithromycin 500mg BD OR metronidazole 400mg BD		
Alternative second line treatment		
If previous exposure to <u>metronidazole and clarithromycin</u> **PPI twice daily** PLUS amoxicillin 1g BD PLUS second antibiotic, either tetracycline hydrochloride 500mg QDS OR levofloxacin 250mg BD	**If previous <u>levofloxacin</u> exposure** **PPI twice daily** PLUS bismuth subsalicylate 525mg QDS OR tripotassium dicitratobismuthate 240mg QDS PLUS tetracycline hydrochloride 500mg QDS PLUS metronidazole 400mg BD	**7 days**

- PPI medication: lansoprazole 30mg BD, omeprazole 20-40mg BD, pantoprazole 40mg BD, esomeprazole 20mg BD, rabeprazole 20mg BD
- Most PPIs are metabolised in the liver, with 18-27% of Europeans, compared to only 1-3% of Asians being rapid PPI metabolisers. **Rabeprazole** is not metabolised in the liver and, therefore, may be a good choice in Caucasians with treatment relapse.
- If post gastro-duodenal bleed, start HP treatment only when patient can take oral medication
- If diarrhoea develops, consider *<u>Clostridium difficile</u>* and review need for treatment

Only **offer longer duration** or **third-line eradication** on advice from a specialist

THIRD LINE: 10 days of PPI twice daily, PLUS bismuth subsalicylate 525mg QDS, PLUS 2 antibiotics as above not previously used, OR rifabutin 150mg BD, OR furazolidone 200mg BD

Retesting for Helicobacter pylori post treatment

As 64% of patients with functional dyspepsia will have persistent recurrent symptoms, do not routinely offer re-testing after eradication

Offer retesting:

- If compliance poor, or high local resistance rates

- If persistent symptoms, and HP test performed within two weeks of taking PPI, or within four weeks of taking antibiotics
- In patients with an associated peptic ulcer or MALT lymphoma, or after resection of an early gastric carcinoma
- In patients requiring aspirin, where PPI is not co-prescribed
- In patients with severe persistent or recurrent symptoms, particularly if not typical of GORD

Wait at least four weeks (ideally eight weeks) after treatment

PPI's need to be stopped at least 2 weeks, and any antibiotics or bismuth compounds at least 4 weeks before H. pylori testing is carried out

- If acid suppression needed use H_2 antagonist

How to retest?

- Offer either UBT or SAT- depending on local availability
- UBT most accurate, SAT is an alternative

However, if they are having a further endoscopy for any indication (for example all GU patients have repeat endoscopy to ensure healing and exclude gastric adenocarcinoma) biopsy-based tests can also be used provided PPIs/antibiotics/Bismuth compounds can be safely stopped within the recommended time frames as above

If either test still positive- then offer second line treatment

Eradication failure

In the event of a positive HP test following eradication:

- Reassess need for eradication; In patients with GORD or non-ulcer dyspepsia, with no family history of cancer or peptic ulcer disease, a maintenance PPI may be appropriate after discussion with the patient

Who to refer to secondary care?

- Patients in whom the choice of antibiotic is reduced due to hypersensitivity, known local high resistance rates, or previous use of clarithromycin, metronidazole, and a quinolone

- Patients who have received **two courses of antibiotic treatment**, and remain HP positive and **have a clear indication for eradication**

- For any advice, speak to your local microbiologist or refer patients to the gastroenterology services for outpatient review and consideration of third line treatments or H. pylori culture and susceptibility testing

References

- Public Health England (2019) Test and treat for Helicobacter pylori (HP) in dyspepsia Quick reference guide for primary care: For consultation and local adaptation. Available from: https://www.gov.uk/government/publications/helicobacterpylori-diagnosis-and-treatment (accessed 10/9/19)
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