H pylori testing and eradication for adults

When should I test for *Helicobacter pylori (HP)?*

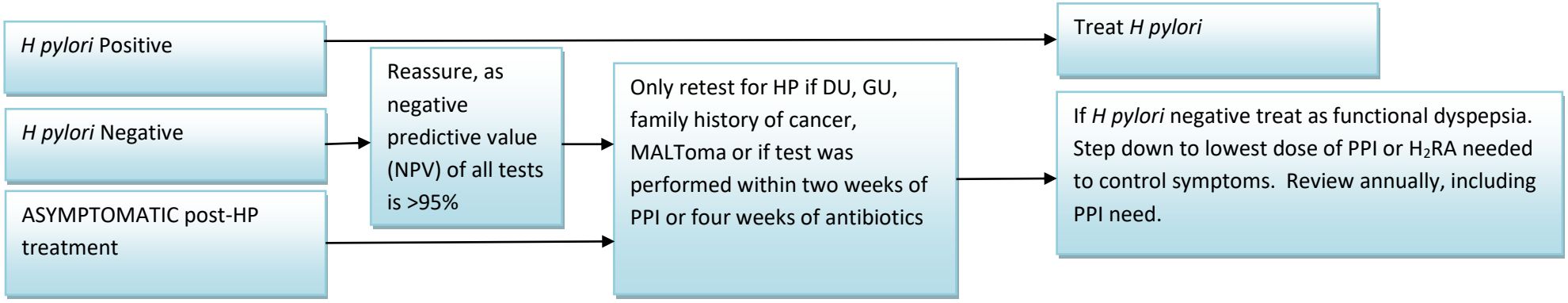
- Patients with uncomplicated dyspepsia unresponsive to lifestyle change and antacids, following a single one month course of proton pump inhibitor (PPI), without alarm symptoms.
- Patients with a history of gastric or duodenal ulcer or bleed, if they have not previously been tested.
- Before starting or taking NSAIDs, if there is a history of gastro-duodenal ulcers or bleeds. Note that 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.

Before stool antigen or urea breath testing for *H pylori*, patients should have stopped bismuth or PPI for at least **2 weeks**; antibiotics for **4 weeks**; or results may be unreliable

When is a test for *Helicobacter pylori* **not required***?*

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

When should I treat *Helicobacter pylori?*



How should I treat *Helicobacter pylori?*

- Eradication therapy is much more likely to succeed if the patient fully understands the reason for their treatment and is given full information and counselling to encourage excellent adherence.
- Macrolide and quinolone resistance is an important risk factor for treatment failure. Metronidazole or tetracycline and amoxicillin resistance is less important.
- To reduce the emergence of resistance and *Clostridioides difficile* infection (CDI), avoid levofloxacin regimes unless no other options available.
- Doses detailed below assume non pregnant adults with normal renal and hepatic function.
- If post gastro-duodenal bleed, only start HP treatment when patient can take oral medication.
- If on intravenous antibiotics for concurrent illness which adhere to the 1st line drug choices below, the total IV/PO antibiotic duration should be 7 days.
- If diarrhoea develops, consider CDI and review need for treatment

*PPI regimes as per NHS Tayside formulary/PHE 2019 (omeprazole 20mg – 40mg bd or lansoprazole 30mg bd for 7 days)
**Consider quinolone warnings and interactions and prolonged QT with clarithromycin

NO PENICILLIN ALLERGY	PENICILLIN ALLERGY
FIRST LINE: 7 days PPI bd* PLUS amoxicillin 1g bd PLUS either metronidazole 400mg bd OR clarithromycin 500mg bd**	**FIRST LINE: 7 days** PPI bd* PLUS metronidazole 400mg bd PLUS clarithromycin 500mg bd**
ONGOING SYMPTOMS after first line – SECOND LINE: 7 days PPI bd* PLUS amoxicillin 1g bd PLUS second antibiotic not used in first line, either clarithromycin 500mg bd** or metronidazole 400mg bd	**FIRST LINE WITH PREVIOUS MACROLIDE EXPOSURE (in last 12 months) OR SECOND LINE WITH PREVIOUS QUINOLONE EXPOSURE (in last 12 months) : 10 days** PPI bd* PLUS PYLERA® 3 tablets FOUR times daily after food (each Pylera tablet contains 140mg bismuth subcitrate potassium/ 125mg metronidazole/ 125mg tetracycline) As an alternative to Pylera tablets if combination tablet not suitable: PPI twice daily PLUS bismuth subsalicylate 525mg qds (or if not available consider tripotassium dicitratobismuthate 240mg qds (unlicensed) – please note there is no file on vision for this product so it should be prescribed on a paper GP 10 paper form and documented in patient journal) PLUS tetracycline hydrochloride 500mg qds PLUS metronidazole 400mg bd
ONGOING SYMPTOMS AFTER FIRST LINE AND PREVIOUS EXPOSURE TO METRONIDAZOLE AND CLARITHROMYCIN – SECOND LINE: 7 days PPI bd* PLUS amoxicillin 1g bd PLUS tetracycline 500mg qds OR levofloxacin** 250mg bd (if tetracycline unsuitable)	**ONGOING SYMTOMS AFTER FIRST LINE AND NO PREVIOUS EXPOSURE TO LEVOFLOXACIN: 7 days** PPI bd* PLUS metronidazole 400mg bd PLUS levofloxacin**250mg bd

THIRD LINE: Only offer longer duration or third line therapy on advice from specialist

When should I retest for *Helicobacter pylori*?

- Re-testing after eradication should not routinely be offered – 64% of patients with functional dyspepsia will have recurrent symptoms
- Offer if:
  - Compliance poor, or high local resistance rates
  - Persistent symptoms and HP test performed within 2 weeks of taking PPI, or within 4 weeks of taking antibiotics
  - Patients with an associated peptic ulcer, after resection of an early gastric carcinoma or MALT lymphoma
  - Patients requiring aspirin, where PPI is not co-prescribed
  - Patients with severe persistent or recurrent symptoms, particularly if not typical of GORD
- Wait at least 4 weeks (ideally 8 weeks) after treatment. If acid suppression needed use H_2RA
- Use second line treatment if test remains positive

What should I do in eradication failure?

- 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

What should I refer for endoscopy, culture and susceptibility testing?

- Patients in whom the choice of antibiotic is reduced due to hypersensitivity
- Patients who have received two courses of eradication treatment and remain HP positive

References:

Public Health England. Test and treat for *Helicobacter pylori* (HP) in dyspepsia. Quick reference guide for primary care: For consultation and local adaptation. Updated Feb 2019.

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Tayside Area Formulary

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