H pylori testing and eradication for adults

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

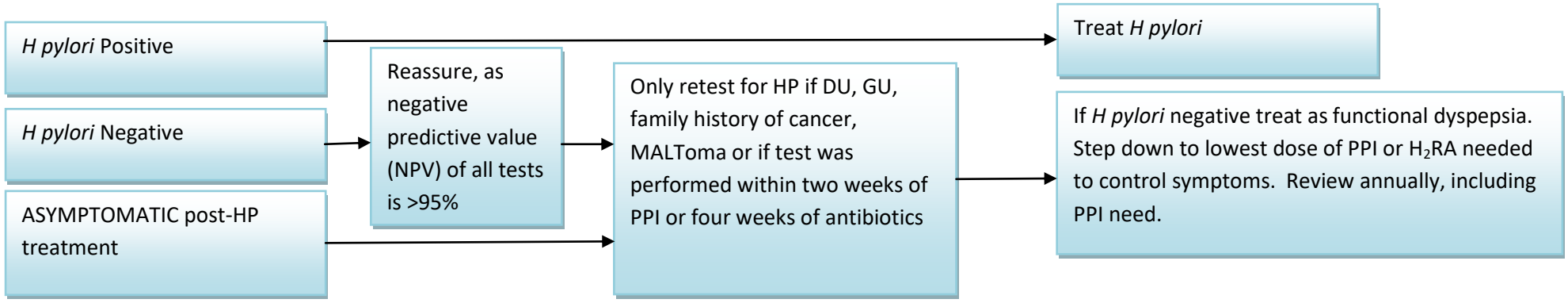
- Patients with uncomplicated dyspepsia unresponsive to lifestyle change and antacids, following a single one month course of proton pump inhibitor (PPI), without alarm symptoms.
- Patients with a history of gastric or duodenal ulcer or bleed, if they have not previously been tested.
- Before starting 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) : 7 days** PPI bd* PLUS bismuth subsalicylate 525mg qds 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.

NICE CG184. Gastro-oesophageal reflux disease and dyspepsia in adults: investigation and management. Updated November 2019.

O'Connor A et al. Treatment of Helicobacter pylori in infection 2010. *Helicobacter* 2010 Sept;15 Suppl 1:46-52.

Tayside Area Formulary

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