

ANMC *Helicobacter pylori* Adult Treatment Guideline

Background Information¹

- 75% of the AN/Al population is colonized with *H. pylori* (range: 61-84%, by region)
- Screening or testing for *H. pylori* for routine evaluation of dyspepsia or other GI symptoms is **not** clinically useful or supported by clinical evidence for high prevalence populations
- For routine clinical practice, there is **insufficient evidence-based data** to support community-wide treatment eradication as a mechanism for gastric cancer prevention.
- Current literature **DO NOT** support a test and treat method

Local Antimicrobial Resistance Patterns⁵

Quadruple therapy is recommended over triple therapy in the AN/Al population due to resistance

- **22-30% resistance** rate to clarithromycin with no significant differences between age groups or urban vs. rural setting, but higher in females
- **37-44% resistance** to metronidazole with no difference between urban or rural settings and patients aged 30-49 years of age (ie, prior metronidazole exposure)
- **0-2% resistance** to amoxicillin
- **7.5-18.6% resistance** to levofloxacin with higher rates in urban vs rural setting, and patients >60 years of age
- **0.1% resistance** to tetracycline
- No local surveillance data for rifabutin

When *H. pylori* is identified by histology and/or CLOtest from EGD, should treatment occur?¹

Yes

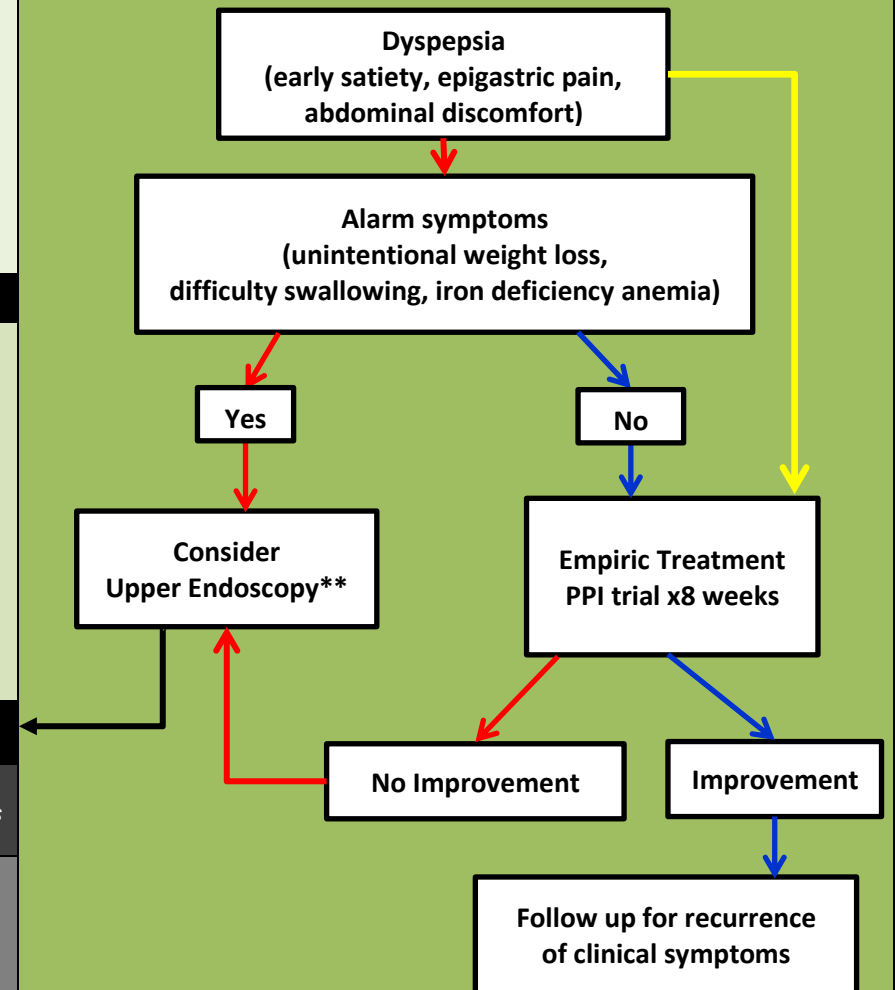
- ❖ Family history of first degree relative with gastric cancer
- ❖ Endoscopy reveals the following:
 - ❖ Duodenal ulcers
 - ❖ Gastric ulcers
 - ❖ Gastric MALT lymphoma
 - ❖ Gastric intestinal metaplasia

No

(Many causes of dyspepsia exist where antibiotics would not help)

- ❖ Gastroesophageal reflux disease (GERD)
- ❖ Irritable bowel syndrome (IBS)
- ❖ Mild/moderate gastritis w/wo anemia
- ❖ Excessive/chronic NSAID use
- ❖ Heavy alcohol use
- ❖ Gastritis regardless of *H. pylori* status
- ❖ Poor gastric motility (*bezoars or conditions predisposing to GI motility disorders such as scleroderma or diabetes*)

Testing Strategy¹



****Further evaluation and treatment are dependent on findings of pathology found on endoscopy**

Antimicrobial Stewardship Program Approved Nov 2016; Updated February 16, 2022

REFERENCES: 1. McMahon et al, *Epidemiol Infect.* 2016 Jan;144(2):225-33. 2. Koletzko et al, *JPGN.* 2011 Aug; 53(2):230-244. 3. Mahadevan U et al, *Gastroenterology.* 2006;131(1):283. 4. Goldberg D et al, *Obstet Gynecol.* 2007;110(3):695. 5. Mosites et. al. *J of Global Antimicrobial Resistance.* 2018;15:148-1536. Fallone et al, *Gastroenterology* 2016 Jul;151(51):69. 7. Cardaropoli et al, *World J Gastroenterol* 2014; 20(3):654-664. 8. Bruce et al, *Epidemiol. Infect.* (2015), 143, 1236–1246. 9. Carothers JJ et al, *Clin Infect Dis.* 2007 Jan 15;44(2):e5-8.

ANMC *Helicobacter pylori* Adult Treatment Guideline CONSIDERATIONS

Gastric Cancer Family History		Pregnancy & Lactation ^{3,4,7}
As of 2019, gastric cancer screening (H. pylori testing and EGD) is being offered to patients with first degree relatives (mother, father, sibling, son/daughter) with gastric cancer. Treatment and test of cure is recommended for positive <i>H. pylori</i> tests in these patients.		<ul style="list-style-type: none"> Delay treatment until after pregnancy
		<p>Do not use in PREGNANCY: <i>bismuth</i> and <i>tetracycline</i></p> <p>Do not use with LACTATION: <i>bismuth</i> and <i>levofloxacin</i></p> <p>Use with caution with LACTATION: <i>metronidazole</i> and <i>tetracycline</i></p>
Symptomatic Relief Medications		Eradication Testing ⁸
Adults		≥ 2 months after treatment completion
<ul style="list-style-type: none"> Omeprazole 20mg PO BID or 40mg PO daily 		<ul style="list-style-type: none"> Urea Breath Test (UBT) for test of cure is necessary to determine eradication and need for retreatment. Patient must be off PPI ≥ 2 weeks prior to UBT. Stool antigen test can be used for test of cure as well. 10-35% of individuals will fail treatment Serologic testing is not recommended due to prolonged antibody persistence beyond date of cure and false positive results
Antibiotic Selection ^{1,6,9}		
	Adults	Duration
Preferred Treatment (4 drug regimen)	<ul style="list-style-type: none"> Metronidazole 500mg PO QID Amoxicillin 1000mg PO BID Omeprazole 20mg PO BID Bismuth subsalicylate 524mg PO QID 	14 days
PCN allergic (4 drug regimen)	<ul style="list-style-type: none"> Metronidazole 500mg PO QID Doxycycline 100mg PO BID Omeprazole 20mg PO BID Bismuth subsalicylate 524mg PO QID 	14 days
Recurrence/Failure	<ul style="list-style-type: none"> Metronidazole 500mg PO QID Doxycycline 100mg PO BID Omeprazole 20mg PO BID Bismuth subsalicylate 524mg PO QID --OR-- Amoxicillin 1000mg PO BID Levofloxacin 500mg PO Daily Omeprazole 20mg PO BID 	14 days
If ≥ 1 treatment failure occurs or a different combination of antibiotics are needed, consider consultation with a <i>clinical pharmacy or infectious diseases specialist</i> .		
ANMC Associated Powerplan: AMB <i>H. pylori</i> Therapy		

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