

# ANMC *Helicobacter pylori* Adult Treatment Guideline

## Background Information<sup>1</sup>

- 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 Patterns<sup>5</sup>

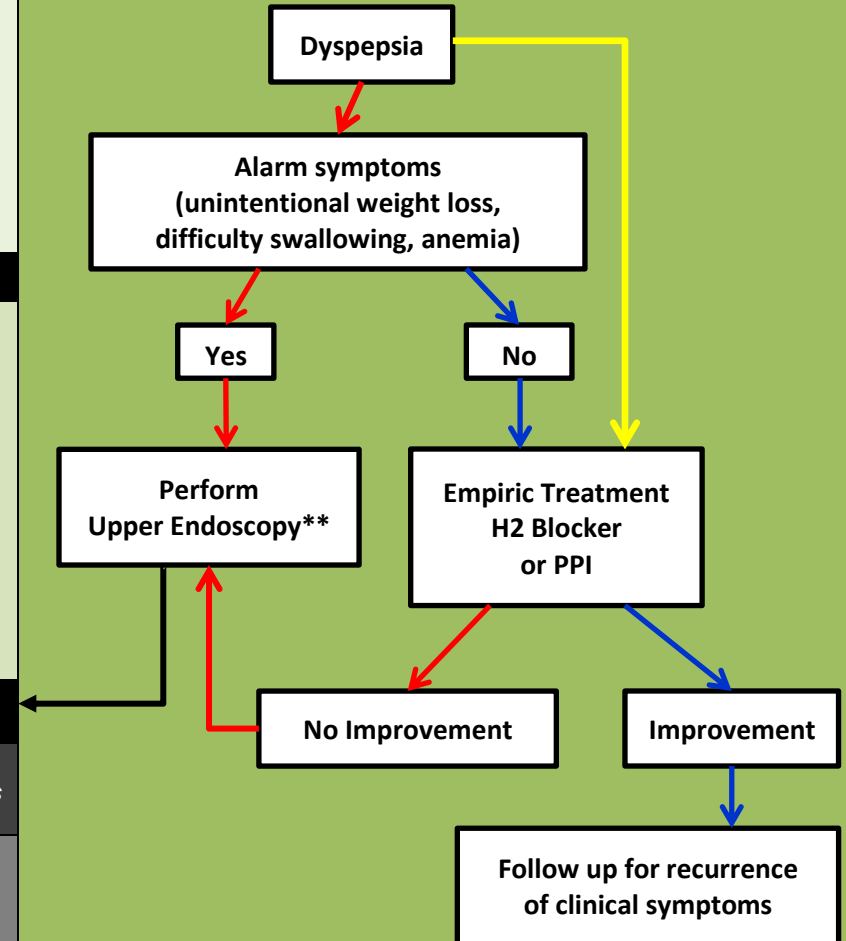
Quadruple therapy is recommended over triple therapy in the AN/Al population due to resistance

- **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?<sup>1</sup>

Yes	No (Many causes of dyspepsia exist where antibiotics would not help)
<ul style="list-style-type: none"> <li>❖ Family history of first degree relative with gastric cancer</li> <li>❖ Endoscopy reveals the following:                             <ul style="list-style-type: none"> <li>❖ Duodenal ulcers</li> <li>❖ Gastric ulcers</li> <li>❖ MALT lymphoma</li> <li>❖ Intestinal metaplasia</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Gastroesophageal reflux disease (GERD)</li> <li>❖ Irritable bowel syndrome (IBS)</li> <li>❖ Mild/moderate gastritis w/wo anemia</li> <li>❖ Excessive/chronic NSAID use</li> <li>❖ Heavy alcohol use</li> <li>❖ Gastritis regardless of <i>H. pylori</i> status</li> <li>❖ Poor gastric motility (<i>bezoars</i> or conditions predisposing to GI motility disorders such as <i>scleroderma</i> or <i>diabetes</i>)</li> </ul>

## Testing Strategy<sup>1</sup>



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

Antimicrobial Stewardship Program Approved Nov 2016; Updated February 19, 2020

**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 <sup>3,4,7</sup>	
As of 2019, gastric cancer screening ( <i>H. pylori</i> testing and EGD) is being offered to patients with first degree relatives (mother, father, sibling, son/daughter) with gastric cancer. <b>Treatment and test of cure is recommended</b> for positive <i>H. pylori</i> tests in these patients.	<ul style="list-style-type: none"> <li>▪ Delay treatment until after pregnancy</li> </ul> <p style="color: red; margin-top: 5px;"><b>Do not use in PREGNANCY:</b> bismuth and tetracycline</p> <p style="color: red; margin-top: 5px;"><b>Do not use with LACTATION:</b> bismuth, metronidazole, levofloxacin</p>	
Symptomatic Relief Medications	Eradication Testing <sup>8</sup>	
Adults	≥ 2 months after treatment completion	
<ul style="list-style-type: none"> <li>▪ <b>Ranitidine</b> 150mg PO BID     <b>OR</b></li> <li>▪ <b>Omeprazole</b> 20mg PO BID or 40mg PO daily</li> </ul>	<ul style="list-style-type: none"> <li>▪ Urea Breath Test (UBT) for test of cure is necessary to determine eradication and need for retreatment. Patient must be off PPI ≥ <b>2 weeks prior to UBT.</b></li> <li>▪ 10-35% of individuals will fail treatment</li> <li>▪ Serologic testing is not recommended due to prolonged antibody persistence beyond date of cure and false positive results</li> </ul>	
Antibiotic Selection <sup>1,6,9</sup>		
	Adults	Duration
<b>Preferred Treatment</b> (4 drug regimen)	<ul style="list-style-type: none"> <li>• <b>Metronidazole</b> 500mg PO QID</li> <li>• <b>Amoxicillin</b> 1000mg PO BID</li> <li>• <b>Omeprazole</b> 20mg PO BID</li> <li>• <b>Bismuth subsalicylate</b> 524mg PO QID</li> </ul>	14 days
<b>PCN allergic</b> (4 drug regimen)	<ul style="list-style-type: none"> <li>• <b>Metronidazole</b> 500mg PO QID</li> <li>• <b>Doxycycline</b> 100mg PO BID</li> <li>• <b>Omeprazole</b> 20mg PO BID</li> <li>• <b>Bismuth subsalicylate</b> 524mg PO QID</li> </ul>	14 days
<b>Recurrence/Failure</b>	<ul style="list-style-type: none"> <li>• <b>Metronidazole</b> 500mg PO QID</li> <li>• <b>Doxycycline</b> 100mg PO BID</li> <li>• <b>Omeprazole</b> 20mg PO BID</li> <li>• <b>Bismuth subsalicylate</b> 524mg PO QID</li> <li style="text-align: center;">--OR--</li> <li>• <b>Amoxicillin</b> 1000mg PO BID</li> <li>• <b>Levofloxacin</b> 500mg PO Daily</li> <li>• <b>Omeprazole</b> 20mg PO BID</li> </ul>	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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