ANMC *Helicobacter pylori* Treatment Guideline

Background Information[1]

- 75% of the AN/AI 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[5]

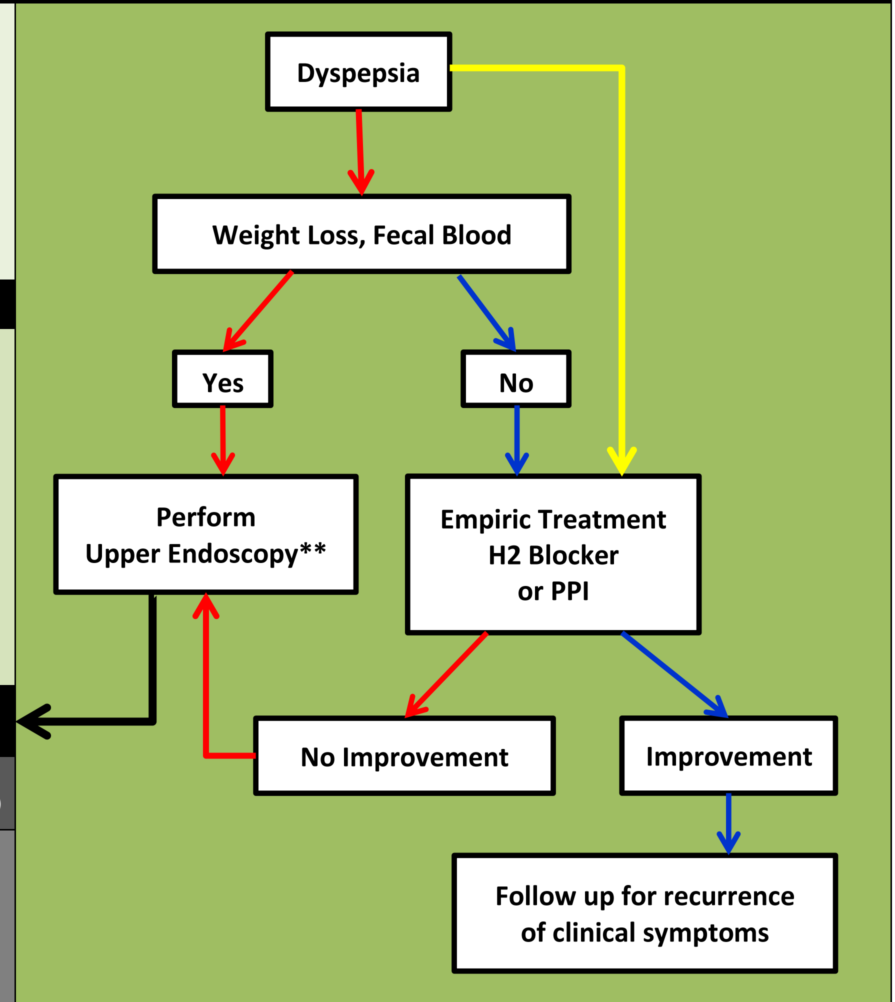
Quadruple therapy is recommended over triple therapy in the AN/AI population due to resistance

- **30-36% resistance** rate to **clarithromycin** with no significant differences between age groups or urban vs. rural setting
- **42- 65% resistance** to **metronidazole** with no difference between urban or rural settings but higher in females and patients aged 30-40 years of age (ie, prior metronidazole exposure)
- **0-5% resistance** to **amoxicillin**
- **19- 26% resistance** to **levofloxacin** with higher rates in urban vs rural setting
- No resistance to **tetracycline**
- No local surveillance data for **rifabutin**

H. pylori is identified by histology and/or CLOtest from EGD, when should treatment occur?[1]

Yes	No* (Many causes of dyspepsia exist where antibiotics would not help)
Endoscopy reveals the following: • Duodenal ulcers • Gastric ulcer • MALT lymphoma • Intestinal metaplasia	• 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 Strategy[1]



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

Antimicrobial Stewardship Program Approved Nov 2016

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. Tveit et al, *J Clin Microbiol*. 2011 Oct;49(10):3638-43. 6. 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.

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CONSIDERATIONS

Pediatrics[2]	Pregnancy & Lactation[3,4,7]
▪ Goal is to determine underlying cause of symptoms, not solely the presence of *H. pylori* infection ▪ Diagnostic testing is NOT recommended with functional abdominal pain ▪ Consider formal consult with Gastroenterology	▪ Delay treatment until after pregnancy **Do not use in PREGNANCY**: *bismuth* and *tetracycline* **Do not use with LACTATION**: *bismuth*, *metronidazole*, *levofloxacin*

Symptomatic Relief Medications		**Eradication Testing[8]**
Adults	**Children**	**≥ 2 months after treatment completion**
Ranitidine 150mg PO BID **Omeprazole** 20mg PO BID	**Ranitidine** 5-10mg/kg PO divided BID	▪ UBT for *Test of Cure* is necessary to determine need for retreatment ▪ 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 ▪ Must be off PPI **≥ 2 weeks prior to UBT**

Antibiotic Selection[1,6,9]

	Adults	Duration
Preferred Treatment	**Metronidazole** 500mg PO QID **Amoxicillin** 1000mg PO BID **Omeprazole** 20mg PO BID **Bismuth subsalicylate** 524mg PO QID	14 days
PCN allergic (anaphylactic)	**Metronidazole** 500mg PO QID **Doxycycline** 100mg PO BID **Omeprazole** 20mg PO BID **Bismuth subsalicylate** 524mg PO QID	14 days
Recurrence/Failure	**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, consult with a ***clinical pharmacy* or *infectious disease specialist***

*****FDA Black Box Warning:** Disabling & sometimes permanent damage to tendons, muscles, joints, nerves & CNS. Can be hours to weeks after starting medication, may persist for 14 months to 9 years after discontinuation.

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