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ACG Clinical Guidelines: Treatment of *Helicobacter pylori* Infection

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"All patients who are treated for *H. pylori* infection should undergo a test of cure with an appropriately conducted urea breath test, fecal antigen test, or biopsy-based test at least 4 weeks after completion of therapy."

The 2024 ACG Clinical Guideline on the treatment of *Helicobacter pylori* infection emphasizes the pivotal role of accurate testing and the "test-treat-test" approach to ensure effective disease management. Key recommendations highlight the importance of pre-treatment testing, tailored therapy, and post-treatment confirmation of eradication. Testing for *H. pylori* is critical in patients with a high pre-test probability of infection, including those with peptic ulcer disease, gastric cancer risk, or unexplained dyspepsia. Non-invasive tests, such as the stool antigen test (SAT) and urea breath test (UBT), offer high sensitivity and specificity for detecting active infection. *H. pylori* exhibits high rates of antibiotic resistance to multiple antibiotic classes, necessitating routine confirmation of eradication.

Test-Treat-Test Approach

The importance of the "test-treat-test" strategy is emphasized to optimize outcomes:

1. **Initial Testing:**
   - Conduct reliable diagnostic testing before initiating therapy to confirm infection.
   - Non-invasive testing methods, particularly SAT and UBT, are preferred in most cases.
   - Invasive testing via endoscopy is recommended in patients with alarm symptoms or when biopsy-based methods are needed.

2. **Tailored Treatment:**
   - Local resistance patterns and patient-specific factors, such as prior antibiotic exposure and allergies should guide therapy.
   - The guideline recommends quadruple therapy (bismuth or non-bismuth-based) or tailored triple therapy where resistance patterns are well-characterized.

3. **Post-Treatment Testing:**
   - Eradication rates with traditional treatments have declined over the last 20 years, so confirming eradication is essential to ensure treatment success and reduce the risk of recurrence or complications.
   - In patients with dyspepsia, post-treatment testing should be performed in all patients regardless of post-treatment symptoms. This allows clinicians to consider alternative treatments in those patients where infection persists or identify an alternate treatment for dyspepsia in patients with successful *H. pylori* eradication.

- Post-treatment testing should be performed at least four weeks after therapy completion using a reliable non-invasive method like SAT or UBT.
- Following a test-treat-test approach, which includes an evidence-based treatment regimen and confirming eradication with a negative post-treatment test, only 1% of patients in the US experience recurrent infections annually.
- Serologic testing is not recommended for follow-up, as it cannot distinguish between active and past infections.

Benefits of Test-Treat-Test

1. **Improved Eradication Rates:** Ensures infection is accurately diagnosed and treated with an effective regimen.
2. **Minimized Resistance Development:** Avoids unnecessary use of antibiotics in individuals with latent infection.
3. **Prevention of Recurrence and Complications:** Post-treatment testing confirms eradication, reducing risks of peptic ulcer recurrence and gastric malignancy.

Summary

- The ACG Clinical Guideline highlights testing as the cornerstone of *H. pylori* management.
- The “test-treat-test” approach ensures precise diagnosis and effective treatment and safeguards against resistance and recurrence.
- Adherence to these recommendations is crucial for optimizing patient outcomes and public health.