What is the status of Sequential Therapy Versus Standard Triple-Drug Therapy in peptic ulcer disease in eradicating H pylori?
Sequential Therapy Versus Standard Triple-Drug Therapy for Helicobacter pylori Eradication

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• **BACKGROUND**: Antimicrobial resistance has decreased eradication rates for *Helicobacter pylori* infection worldwide.

• **OBJECTIVE**: To determine whether sequential treatment eradicates *H. pylori* infection better than standard triple-drug therapy for adults with dyspepsia or peptic ulcers.
• **DESIGN**: Randomized, double-blind, placebo-controlled trial.

• **SETTING**: Two Italian hospitals between September 2003 and April 2006.

• **PATIENTS**: 300 patients with dyspepsia or peptic ulcers.

STRENGTH OF RECOMMENDATION


2. Chey WD, Wong BC. American College of Gastroenterology guideline on the management of H.pylori infection. Am J Gastroenterol. 2007; 102


H. pylori Eradication

• Causes:
  • Peptic ulcers
  • Gastric mucosa-associated lymphoid tissue lymphoma
  • Gastric cancer
Standard Treatments

- US & European authorities rely on CLARITHROMYCIN or METRONIDAZOLE in conjunction with OTHER ANTIBIOTICS and ACID INHIBITORS.
The prevalence of Clarithromycin and Metronidazole resistance has increased substantially in recent years, and there has been a corresponding decrease in the eradication rate for H. pylori infection.
Present Scenario

- Eradication rates in most western countries have declined to unacceptable levels. Eradication therapy fails in approximately 1 in 5 patients.
A simple, short treatment regimen that would return eradication levels to those seen at the advent of H.pylori treatment is urgently needed.
Present Scenario

- Such a regimen should have high efficacy against clarithromycin-resistant and metronidazole-resistant strains of H. pylori because these strains are increasingly encountered in routine clinical practice.
MEASUREMENTS

- 13urea breath test
- Upper GI endoscopy
- Histologic evaluation
- Rapid urease test
- Bacterial culture
- Assessment of antibiotic resistance
STANDARD THERAPY

- PPI for 7-10 days : Day 1-7 or 10th, and AMOXICILLIN or IMIDAZOLE plus CLARITHROMYCIN for 7-10 days: Day 1-7 or 10th.
SEQUENTIAL THERAPY

- PPI for 10 days: Day 1-10\textsuperscript{th} days
- AMOXICILLIN for 5 days: Day 1-5\textsuperscript{th} days
- IMIDAZOLE plus CLARITHROMYCIN for next 5 days: Day 6-10\textsuperscript{th} days.
RESULTS

• In ITALY, eradication rates of > 90% have been reported with a sequential therapy.

• META-ANALYSIS: 9 RCTs
  Pooled eradication rates were 93.4% for sequential therapy and 76.9% for standard therapy.
RESULTS

• For every 6.3 patients treated with sequential therapy, there would be 1 additional cure compared to standard therapy.

• Adherence rates were similar in both groups (Median adh rate : seq vs stnd = 97.4% vs 96.8%).

• Reported side effects were similar in both groups.
CONCLUSION

• Sequential therapy is statistically significant.
• Sequential therapy is more effective in patients with clarithromycin-resistant strains.
THANKS