Efficacy of Levofloxacin and Metronidazole-Based Triple Therapy in Eradicating Helicobacter Pylori in Patients with Chronic Recurrent Epigastric Pain: A Prospective Study in Zakho, Iraq

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Abstract:

Background: Antibiotic resistance and adverse effects pose significant challenges to the effectiveness of Helicobacter pylori eradication therapies, such as clarithromycin-based triple therapy. Alternative treatments, including bismuth quadruple therapy, are effective in cases of clarithromycin resistance. Levofloxacin and metronidazole-based triple therapy have demonstrated high success rates with fewer side effects, making it a preferred option following clarithromycin treatment failure.

Objectives: This study aimed to evaluate the effectiveness of levofloxacin and metronidazole in eradicating H. pylori among patients with chronic epigastric pain in Zakho, Iraq. It also assessed the accuracy of diagnostic tests, patient history, and post-treatment confirmation of eradication.

Methods: A prospective study was conducted involving 100 patients with chronic epigastric pain at Zakho General Teaching Hospital. Diagnosis was performed using the fecal antigen test, urea breath test (UBT), and endoscopy with biopsy. Patients were treated with a 14-day regimen comprising levofloxacin, metronidazole, and either esomeprazole or pantoprazole.

Results: Of the 100 participants, 66% were female, with a mean age of 37.85 years. The fecal antigen test, performed on 60 patients, showed a positivity rate of 96.5%, while the UBT, conducted on 40 patients, revealed a positivity rate of 97.5%. The highest infection rate was observed in the 51 - 60 age group. The 14-day levofloxacin and metronidazole regimen achieved a 99% eradication rate with minimal side effects.

Conclusions: This study underscores the high efficacy of levofloxacin and metronidazole-based therapy for H. pylori eradication. It highlights the importance of non-invasive diagnostic methods, enhanced patient follow-up, and international collaboration to achieve optimal treatment outcomes.

Keywords:

Helicobacter Pylori, Levofloxacin and Metronidazole, 14C-Urea Breath Test, Gastritis, Stool Antigen Test (SAT).