Helicobacter pylori eradication experience with sequential treatment consisting of antibiotics which are used in conventional triple therapy

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Abstract

Aim: We aimed to investigate the eradication rate of the sequential treatment using the antibiotics which are used in classic triple therapy.
Methods: Ninety-two non-ulcer dyspepsia patients with positive Helicobacter pylori were included in this study. The presence of Helicobacter pylori was detected by histopathological examination of the biopsy specimen taken from the antrum and corpus. Our Helicobacter pylori eradication treatment protocol was 30 mg lansoprazole twice daily and 1g amoxicillin three times daily were given to the patients in the first 7 days, in the second 7 days 30 mg lansoprazole twice daily, 500 mg clarithromycin twice daily and 1 g amoxicillin twice daily. Six weeks after the end of the treatment, all of the patients were re-evaluated for Helicobacter pylori eradication by the urea breath test. Eradication was considered to be successful in patients with negative urea breath test.
Results: Thirty-four patients (37%) were male and fifty-eight (63%) were female. Mean age of the patients was 44±14 years. H pylori was eradicated in 89.1% of the cases.
Conclusion: Our study demonstrated that the method of nitro-imidazole-free sequential treatment was found to be a more successful method than the classic triple therapy. Given the success rate of eradication, we suggest a sequential treatment that consists of the antibiotics used in classic therapy which may be an important option in the first-line treatment.

Keywords: conventional triple therapy, Helicobacter Pylori eradication, sequential therapy.

Introduction

H pylori infection is one of the most significant morbidity and mortality reasons worldwide. Non-ulcer dyspepsia, peptic ulcer and gastric MALT-lymphoma are the diseases associated with H pylori, and eradication is recommended in these cases according to the recent guidelines published (1). In the literature, it is also reported to be associated with idiopathic thrombocytopenia and idiopathic iron deficiency (2,3). H pylori infection is decreasing in developed countries, whereas it is detected at very high rates in developing countries and the disease is acquired through oral-fecal route. Low socio-economic status and education level, living in a crowded house-hold, drinking infected water are among the important risk factors that cause infection. Although H pylori eradication is not a fully resolved issue, many studies provided regimens with higher rates of eradication success. Antibiotic resistance seems to be an important problem in the H pylori eradication, and updating the treatment regimens with new studies constantly becomes a necessity. Serious decline in the rate of success with the classic triple therapy, in parallel with the increasing clarithromycin resistance all over the world, gave birth to other treatment regimens (4). The success rate of these have risen to >90% by the use of nitro-imidazole with the sequential treatment rather than Clarithromycin (5).

In this present study, we aimed to investigate the eradication rate of the sequential treatment using the antibiotics which are used in classic triple therapy.

Methods

Ninety-two non-ulcer dyspepsia patients with positive Helicobacter pylori were included in the study. The presence of Helicobacter pylori was detected by histopathological examination of the biopsy specimen taken from the antrum and corpus. Our Helicobacter pylori eradication treatment protocol was 30 mg lansoprazole twice daily and 1 g amoxicillin three times daily were given to the patients in the first 7 days, in the second 7 days 30 mg lansoprazole twice daily, 500 mg clarithromycin twice daily and 1 g amoxicillin twice daily. Six weeks after the end of the treatment, all of the patients were re-evaluated for Helicobacter pylori eradication by the urea breath test. Eradication was considered to be successful in patients with negative urea breath test.

Results and Discussion

The demographic data of the patients and the eradication success rates are shown in Table 1. Thirty-four patients (37%) were male and fifty-eight (63%) were female. Mean age of the patients was 44±14 years. H pylori was eradicated in 89.1% of the cases.

Table 1. The demographic features of the patients and the H. pylori eradication success rate

Variable (n=92)	
Age (mean ± standard deviation)	44 ± 14 years
Gender (Male/Female)	34/58
H. pylori Eradication rate (n %)	89.1%

There are studies indicating that the H pylori eradication success may vary among ethnic groups (6). Although the eradication success rates with the classic triple therapy were reported as 80% approximately in the literature, this ratio is found even lower in Turkey in recent years (7,8).

In conclusion, our study demonstrated that the method of nitro-imidazole-free sequential treatment was found to be a more successful method than the classic triple therapy. Given the success rate

of eradication, we suggest a sequential treatment that consists of the antibiotics used in classic therapy, which may be an important option in the first-line treatment.

Conflicts of interest: None declared.

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