



The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

905.OUTCOMES RESEARCH-LYMPHOID MALIGNANCIES

Effects of Antibiotic Eradication Therapy on *H. Pylori*-Negative Stage IE Gastric MALT Lymphoma – Real World Experience

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Background: *Helicobacter pylori* (*H. pylori*) infection plays a critical role in the pathogenesis of gastric MALT lymphoma and its eradication can lead to tumor regression with a complete response (CR) rate of 78% in early-stage disease and a 5-year survival rate > 95%. However, 10% of patients have gastric MALT lymphoma with no detectable *H. pylori* infection (Zullo et al., J Clin Gastroenterol 2010). There is controversy regarding whether *H. pylori*-negative gastric MALT patients should receive a trial of antibiotic therapy. The NCCN guideline recommends skipping antibiotics and proceeding directly to radiation therapy. On the other hand, the ESMO guideline recommends *H. pylori* eradication (HPE) as the first-line therapy for every patient with gastric MALT lymphoma irrespective of *H. pylori* status. This report aimed to evaluate the effectiveness of *H. pylori* eradication therapy in patients with limited-stage gastric MALT lymphoma.

Methods: A retrospective analysis was performed to identify patients diagnosed with stage IE gastric MALT lymphoma between January 2002 and December 2022. *H. pylori* infection was determined by immunostaining of gastric mucosa, serology, stool antigen, or urea breath test. *H. pylori* status was considered positive when at least one of those tests showed positive results and negative when all of the performed test results in that patient were negative. The primary outcome was the CR rate defined as no macroscopic findings of lymphoma and negative biopsy results from the follow-up endoscopy 3-6 months following completion of treatment.

Results: A total of 52 patients were identified; the median age was 68 years (range 52-87), and 29 (55.8%) were male. *H. pylori* infection was detected in 36.5% (19/52) patients by at least one of the methods - 14 cases by immunostaining, 3 cases by serology, and 1 each by stool antigen and urea breath test. The PCR or FISH for t(11;18) was performed in 10 cases (19.2%) and 2 cases of t(11;18) were detected (both were *H. pylori*-negative). All 19 *H. pylori*-positive patients were treated for *H. pylori* eradication (HPE) and 63% (12/19) achieved a CR. Of the 33 *H. pylori*-negative patients, 8 (24.2%) received HPE as the initial treatment and 1 (12.5%) responded with a CR. The treatment outcomes after HPE therapy showed the CR rate was significantly higher in *H. pylori*-positive patients than in *H. pylori*-negative patients (63.2% vs 12.5%, p=0.033) (Table 1). Only 2 of the 12 *H. pylori*-positive patients achieving CR have relapsed after a median follow-up of 89.7 months (range 2.9-227.8); the one *H. pylori*-negative patient that received HPE also remains in CR at 9+ months. The other first-line treatments applied for the 25 *H. pylori*-negative patients were radiation therapy in 18 (54.5%), single-agent rituximab in 3 (9.0%), surgical resections in 2 (6%), oral chlorambucil in 1 (3%), and observation in 1 (3%). The outcomes are shown in Figure 1.

Conclusion: In our United States patient population, the incidence of *H. pylori*-negative gastric MALT lymphoma was 63%, much higher than previously reported (Zullo et al., J Clin Gastroenterol 2010) and similar to that found by other US investigators (Strati et al. 10.1002/ajh.25447). For limited-stage *H. pylori*-positive gastric MALT lymphoma, HPE is an effective first-line treatment and should be used. For patients who have no detectable *H. pylori* infection with multiple methods, the CR rate with HPE is very low in our experience. Although there is likely little harm to trying HPE (as ESMO guidelines suggest), this delays definitive radiation therapy. These data will be useful in patient counseling and treatment decision-making.

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Table 1: Treatment outcomes after *H. pylori* eradication therapy with respect to *H. pylori* infection status. CR, complete remission.

<i>H. pylori</i> infection status	Response—no. (%)		p-value
	CR	No CR	
Positive (n=19; all treated)	12 (63.2)	7 (36.8)	0.033
Negative (n=33; 8 treated)	1 (12.5)	7 (87.5)	

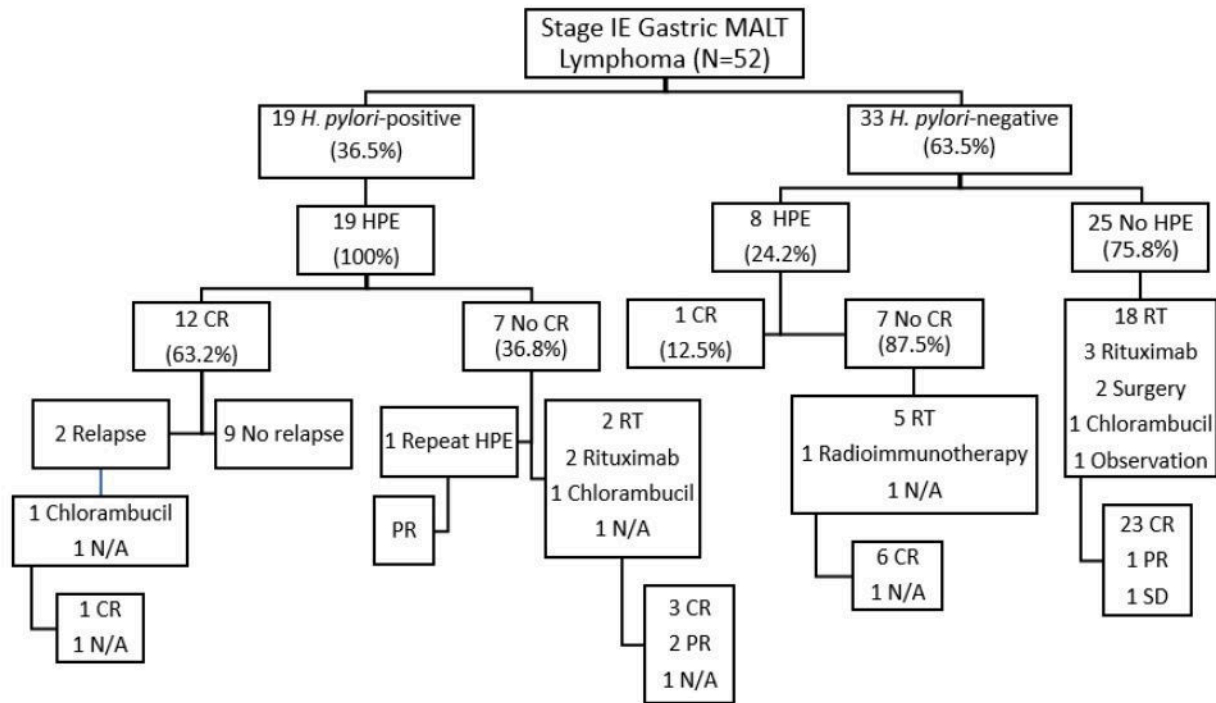


Figure 1. Clinical course and treatment outcomes of patients with stage IE gastric MALT lymphoma. HPE, *H. pylori* eradication therapy; CR, complete remission; RT, radiation therapy; N/A, no available data.

Figure 1

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