

Letter to Editor**The study of relationship between *Helicobacter pylori* density in gastric mucosa and the severity and activity of chronic gastritis****To the Editor**

Although numerous studies have confirmed a cause and effect relationship between *Helicobacter pylori* infection and gastric inflammation, the quantitative relationship between them is controversial. We conducted a cross-sectional retrospective study to see if such a relationship exists between *H. pylori* density and chronic gastritis severity and activity.

Microscopic slides from 272 gastric biopsies diagnosed as *H. pylori* associated chronic gastritis were reviewed. The samples were randomly selected from the archive of pathology lab of Al-Zahra hospital in Isfahan from 1999 to 2000. Hematoxylin-eosin stained slides were reviewed and were divided into three grades in the view of chronic gastritis severity using "The Sydney system". Also, Giemsa stained slides were divided into three grades in the view of *H. pylori* density. Activity of chronic gastritis has been defined as the penetration of neutrophils to foveolar epithelium or gastric pits or both.

The frequency of grades I, II and III of chronic gastritis was 87 (32%), 117 (43%) and 68 (25%), respectively. Gastritis was active chronic in 105 (38.6%) cases. Grades I, II and III of *H. pylori* density were present in 123 (45.2%), 103 (37.9%) and 46 (16.9%) cases, respectively. Significant correlation was observed between *H. pylori* density and severity of chronic gastritis using Spearman's rank correlation ( $P < 0.001$ ), but chi-square test showed no statistically significant relationship between *H. pylori* density and activity of chronic gastritis ( $P > 0.05$ ).

These results, in accordance with data shown in some of the previous studies, suggest a correlation between the grade of chronic gastritis and *H. pylori* density<sup>1-3</sup>. However, there are studies which have not confirmed the presence of such a relationship<sup>4</sup>. The observation of no relationship between *H. pylori* density and chronic gastritis activity in our study has been the conclusion of some other investigators as well<sup>4</sup>, while others have reported vice versa<sup>2</sup>.

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**References**

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