

## The clinical importance of *Helicobacter pylori* antigens detected in the dental plaque and feces

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### ABSTRACT

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**Purpose:** It is expected that *H. pylori* residing outside the stomach influences the results of the stool test. The aim of the study was to investigate the occurrence of *H. pylori* antigens in dental plaque and feces of the patients with *H. pylori* infected and non-infected stomachs.

**Materials and methods:** The study was conducted in 188 dentate patients, 107 with *H. pylori* infected and 81 non-infected stomachs. Stomach infection with *H. pylori* was evaluated with CLO test, histology and culture. The stomach was classified as infected if at least two of three tests (CLO test, culture, histology) were positive and as non-infected if all three tests were negative. Dental plaque was taken only from the natural teeth. On the day of the gastroscopic examination or on the next two days a stool sample was collected for *H. pylori* antigens testing. *H. pylori* antigens in dental

plaque and feces were determined by immunological method.

**Results:** In 60.8% of subjects with an infected stomach, *H. pylori* antigens were present both in the dental plaque and feces, in 37.4% in feces only, in 0.9% only in the dental plaque, and in 0.9% neither in the dental plaque nor feces. In 46.9% of subjects with a non-infected stomach, *H. pylori* antigens were found neither in the dental plaque nor feces, in 24.7% both in the dental plaque and feces, in 23.5% only in the dental plaque, and in 4.9% only in feces.

**Conclusions:** There is a weak association between the occurrence of *H. pylori* antigens in feces and the dental plaque, and also between the occurrence of the antigens in the dental plaque and stomach infection.

**Key words:** *Helicobacter pylori* antigens, immunoassay, dental plaque, feces

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