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**Congress:** The First International Congress of Medical Bacteriology

**Title:** Prevalence of H. pylori in the dental plaque of patients with gastric H. pylori infection by PCR method

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**Abstract:** Background and objectives: Helicobacter pylori is a major human gastric pathogen responsible for gastritis, peptic ulcer disease, gastric adenocarcinoma, gastric MALTomas and gastric cancer. The precise mode of transmission and the natural reservoir for H. pylori are unknown. Despite numerous studies, the hypothesis that the oral flora may be a permanent reservoir of viable H. pylori is still controversial. The bacterium has been detected in saliva, in the microbiota from the dorsum of the tongue, on the surface of oral ulcerations, oral neoplasia and in dental plaque. Dental plaque is a soft gelatinous mass adhering to the tooth surface and other hard surfaces and comprising of bacteria embedded in an organic matrix. Previous studies about the prevalence and association of H. pylori in dental plaque and stomach in a more homogenous population in different regions of world show conflicting results.

The aim of this study was to investigate the prevalence of H. pylori in the dental plaque and possible association between simultaneous dental plaque and gastric H. pylori colonization in gastric H. pylori infected patients by PCR method.

**Material and methods:** Fifty patients undergoing gastroscopy were investigated for the presence of H. pylori in dental plaque by PCR and in the stomach by the rapid urease and PCR methods. Samples tested comprised dental plaque from molars and premolars.

**Results:** The obtained results with the statistical analysis will be presented at Congress.

**Conclusion:** Long-term professional dental plaque control was associated with less gastric reinfection by H. pylori, suggesting that dental plaque control may help to prevent H. pylori-induced gastric disease or reinfection.

**Key word:** Dental plaque, H. pylori, PCR, peptic ulcer disease

**Presentation:** Poster