

MOLECULAR DETECTION OF *Helicobacter pylori* IN SALIVA OF SRI LANKAN PERIODONTITIS PATIENTS WITH AND WITHOUT GASTRITIS

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Helicobacter pylori, a gram-negative bacterium, colonises the gastric mucosa of more than half of the world's population. It can cause a range of diseases from gastritis to gastric cancer. Research indicates this pathogen may also inhabit the oral cavity, potentially serving as a bacterial reservoir. Moreover, periodontitis, a chronic immuno-inflammatory disease affecting the tooth-supporting structures, has been suggested to facilitate the colonisation of *H. pylori* in the oral cavity, potentially serving as a reservoir for gastric reinfection. Given the high prevalence of both periodontitis and gastritis in Sri Lanka and the limited local data on oral *H. pylori*, this study assessed whether oral *H. pylori* is associated with gastritis in Sri Lankan patients with periodontitis. This cross-sectional study involved 98 individuals with periodontitis (53 females and 45 males), recruited from the Teaching Hospital, Peradeniya, and the Dental Teaching Hospital, Peradeniya. Among them, 43 were diagnosed with gastritis, while the remaining 55 had no evidence of gastritis. Saliva samples were collected, genomic DNA was extracted, and PCR was performed to detect the *H. pylori* 16S rRNA gene. Out of the 98 saliva samples analysed, *H. pylori* was detected in 27 cases (27.55%), predominantly in females (20/27), with a statistically significant gender difference. Positivity was higher in gastritis patients (34.9%) than in those without gastritis (21.82%). However, there was no statistically significant difference between the detection rates of these two groups, suggesting that the presence of gastritis does not significantly influence oral *H. pylori* detection in patients with periodontitis ($p > 0.05$). These findings suggest that the oral cavity may serve as a reservoir for *H. pylori*, implying that oral *H. pylori* can colonise in periodontitis patients without the influence of gastritis. However, further studies are needed to elucidate the role of oral *H. pylori* in periodontitis and its potential contribution to the transmission of gastric diseases.

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