

## HELICOBACTER PYLORI AND VASCULAR DISEASE

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### ABSTRACT

**Background:** Helicobacter pylori infection is reported to have many varied extra gastrointestinal manifestation such as idiopathic thrombocytopenia, Iron deficiency anaemia, Ischemic heart disease (IHD), vascular disease, and neurological disorders (like stroke, Parkinson's disease and Alzheimer's disease)<sup>1</sup> Many studies conclude that the presence of chronic infection could be a risk factor for vascular disease leading to IHD.<sup>2</sup>

**Objectives:** The objective of this study was to find an association between H.pylori infection and lipid profile and carotid intimal thickness which are established risk factors for vascular disease.

**Methodology:** A case control study of 356 patients who underwent Upper Glendoscopy and biopsy were included. Examination done on biopsied tissue divided the patients into H.pylori infected and non-infected groups. All patients underwent ultrasound Doppler of carotid arteries and lipid profile.

**Results:** Out of the 356 patients, 188 were found to have H.pylori infection (cases) and 168 did not (controls). The average carotid intima media thickness in H.pylori infected patients was 0.83mm, whereas in non-infected patients the average thickness was 0.72mm. Thus, there was a statistically significant correlation between carotid intimal media thickness and H.pylori infection ( $p=0.009$ ). Dyslipidemia was seen in 172 patients. Dyslipidemia especially triglyceridemia correlated with increased CIMT but there was no significant correlation between deranged lipid profile and H.pylori infection.

**Conclusion:** This study found that Helicobacter pylori has a significant association with atherosclerosis and ischemic heart disease. The connection however is not by causing dyslipidemia and needs further studies to elucidate the pathogenesis.

**KEYWORDS:** Helicobacter pylori, Vascular disease, CIMT