

# Association between coronary artery disease and H.pylori infection

## Abstract

**Background:** Hypertension, smoking, and hyperlipidemia are main causes of Myocardial Infarction. In recent years other factors such as chronic and persistent bacterial and viral infections are considered as causes of chronic inflammatory reaction in blood vessels leading to atherosclerosis. The high prevalence of both *Helicobacter.pylori* infection and coronary atherosclerosis in our country prompted us to assess the probable association between both conditions

**Aim:** Controversy exists concerning the relation between *Helicobacter pylori* (HP) infection and coronary artery disease (CAD). We aimed to examine the relationship between HP infection and coronary atherosclerosis in patients with CAD.

**Material and Methods:** one hundred fifty five patients with prior history of CAD and angiography who were admitted to Cardiovascular department was consecutively selected as case group and one hundred fifty five patients without any history of CAD or IHD was selected as control group and H.pylori ag test was performed on both group,

**Results:** This study was performed on 310 individuals in two groups including patients with coronary artery stenosis and the control group. In the group of patients with coronary artery stenosis (55.5%) 86 patients and in the control group (52.9%) 82 patients had positive results of *Helicobacter pylori* test. The results of *Helicobacter pylori* test were not significantly different in the group of patients with coronary artery stenosis and control. There was no statistically significant difference between the two variables. Mean triglyceride, LDL of patients with coronary artery stenosis with positive and negative results of *Helicobacter pylori* had a statistically significant difference. In (27.7%) 43 patients had one vessel involved and (56.8%) 88 patients had two vessels involved and (15.8%) 24 patients had three vessels involved. The number of vessels involved in patients with positive and negative results of *Helicobacter pylori* test were significantly different.

**Conclusion:** The results of this study show that the prevalence of Helicobacter pylori is not associated with coronary artery disease, but people with positive Helicobacter pylori results had more coronary arteries involved and higher triglycerides and LDL.

**Keywords:** CAD, H.pylori, atherosclerosis, dyslipidemia