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**Title:** Detection of Helicobacter pylori in human aortic atherosclerotic plaque and thoracic biopsy in patients undergoing coronary artery bypass grafting  

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**Abstract:** Background and objectives: Atherosclerosis is one of the most causes of morbidity and mortality in industrial and developing countries such as Iran. A number of studies demonstrated that infectious microorganism agents may play an important role in the process of atherosclerosis. But the results obtained are contradictory. We aimed to investigate the occurrence of Helicobacter pylori DNA in atherosclerotic Plaques in Patients suffering from coronary artery disease.  

Material and methods: In a cross-sectional study, 85 Patients (43 females and 42 males with the mean age of 61 ± 9.5, range 42-82 years) referred for coronary artery bypass grafting (CABG) in Shahid Mobhamadi hospital in Bandar Abbas were enrolled. Using standard questionnaire, demographic and clinical evaluation were performed. Obtained specimens were processed and then polymerase chain reaction targeting the Ure C gene was carried out to detect Helicobacter pylori DNA. Statistical analyses were performed with SPSS software.  

Result: Helicobacter Pylori was detected within atherosclerotic plaques, in only four out of 85 patients (4.7%), whereas, three out of 85 thoracic biopsy were positive for presence of the mentioned bacteria in internal thoracic artery. There was no statistically difference between atherosclerotic plaque (study group) and thoracic biopsy (control group) in term of H. pylori positivity. (P = 1.00)  

Conclusion: We were not be able to find any association between presence of Helicobacter pylori and development of atherosclerosis.  

**Keywords:** Atherosclerosis, Helicobacter Pylori, Polymerase chain reaction (PCR).  

**Presentation:** Poster