Helicobacter Pylori and non-Malignant Haematological Disorders in Adults

Vasiliki Kyriazi, MD
Department of Clinical Hematology, Lincoln County Hospital, National Health Service (NHS), Lincoln, United Kingdom

Maria Tachtsi, PhD
Infirmary of Vascular Surgery, Central Polyclinic, Institution of Social Insurance (IKA), Thessaloniki, Greece

Correspondence: Dr. Kyriazi Vasiliki, Department of Clinical Hematology, Lincoln County Hospital
Greetwell Road, Lincoln, LN2 5QY, United Kingdom E-mail: kyriazivasili@gmail.com

ABSTRACT

Background: Helicobacter pylori infects half of world’s population causing local tissue damage in gastric mucosa. The implication in a variety of extraintestinal disorders is less clear and the available studies often lead to conflicting results.

Aim: This article will review the implication of Helicobacter pylori in the development of non-malignant haematological disorders in adults. Epidemiological data, possible pathogenetic mechanisms and the role of eradication therapy are analyzed.

Methodology: Relevant articles published in English during the last two decades were found through PubMed and SCOPUS.

Results: Significant advances have been made in understanding the pathophysiology of Helicobacter pylori-induced haematological disorders. The investigation of persistently thrombocytopenic and anaemic patients in absence of other causative factors should include Helicobacter pylori assays. Half of infected thrombocytopenic patients respond to eradication, whereas the outcomes are less clear in anaemic disorders. Bacterial strains and genetic factors seem to influence the outcome of bacterium eradication. The implication of Helicobacter pylori in atherosclerosis remains controversial and it is attributed either to inflammation process or to direct alteration in haemostatic factors.

Conclusion: Large randomized studies are needed to determine the subpopulation at risk of developing Helicobacter pylori-related haematological disorders. In this case prompt screening and eradication treatment could be of major importance.

Keywords: anaemia, Helicobacter pylori, iron deficiency, thrombocytopenia, thrombosis