

## **Navigating Through Surgical Implications of *Helicobacter pylori*: An Up-to-Date Comprehensive Literature Review**

Roxana Chivu<sup>1</sup>, Andrei Evanghelides<sup>2</sup>, Dragoş Eugen Georgescu<sup>2,3</sup>, Traian Pătraşcu<sup>2,3</sup>

<sup>1</sup>Department of Gastroenterology, Emergency County Hospital Targoviste, Romania

<sup>2</sup>Department of General Surgery, Dr. I. Cantacuzino Clinical Hospital, Bucharest, Romania

<sup>3</sup>Department of General Surgery, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

### **Abstract**

*Helicobacter pylori*, a gram-negative bacterium, has been identified as a major contributor to gastrointestinal diseases, ranging from gastritis and peptic ulcers to more severe complications such as gastric adenocarcinoma and mucosa-associated lymphoid tissue (MALT) lymphoma. While pharmacological eradication therapies have been successful in managing *H. pylori* associated diseases, the implications of this bacterium on surgical interventions remain a topic of ongoing research and clinical consideration. This comprehensive review aims to elucidate the intricate surgical implications of *H. pylori* infection. Recent data on the well-known relationship between *H. pylori* and the development of gastroduodenal diseases, including peptic ulcers and gastric cancer, is analyzed. Concurrently, *Helicobacter pylori* infection may have a role in promoting colonic carcinogenesis and, more interestingly, it has also been linked to biliary tract cancers. The review highlights the evolving landscape of *H. pylori* management in the context of surgical interventions, accentuating the need for further research to delineate optimal strategies for preoperative screening, eradication therapies, and their impact on surgical outcomes and long-term patient prognosis. Comprehending the surgical ramifications of *H. pylori* infection remains crucial, emphasizing the significance of interdisciplinary approaches and ongoing research effort aimed at enhancing patient care.

**Key words:** *Helicobacter pylori*, carcinogenesis, strategies, screening, surgical implications, prognosis