

# Helicobacter pylori, non- Helicobacter pylori helicobacters and gastrointestinal diseases

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# Dear Editor,

I read with great interest your article titled "Evaluation of hematological parameters in the differentiation of bile reflux gastritis and Helicobacter pylori (H. pylori) gastritis in children" by Kıran Taşçı E., published in Anatolian Current Medical, 2023;5(4):445-448. H. pylori is a bacterium that remains significant due to its infection of approximately half of the global human population. Recent studies have noted that other Helicobacter species of animal origin can also infect humans. The diagnosis of H. pylori infection typically involves histopathological methods requiring endoscopy, but these methods may be inadequate for diagnosing other Helicobacter species. This text is written to highlight the limitations of histopathological methods in identifying non-H. pylori species and to emphasize the importance of considering their zoonotic nature. This letter aims to contribute to the relevant literature.

It is known that *H. pylori* can infect approximately 50% of the global population, leading to conditions such as gastritis, ulcers, and stomach cancer.¹ The article by Kıran Taşçı E.² emphasizes that dyspeptic symptoms in children may arise from *H. pylori* infection as well as from various other causes. The same article notes that the use of histopathological methods for identifying dyspeptic disorders necessitates upper gastrointestinal endoscopy. Research indicates that individuals infected with *H. pylori* can be asymptomatic; however, *H. pylori* is most commonly associated with gastrointestinal disorders.³

In diagnosing *H. pylori*, there are both invasive and non-invasive test-based methods, each with its own advantages and disadvantages. The sensitivity and specificity of

non-endoscopy-based methods are still debated, and research in this area is ongoing. As Kıran Taşçı E. has indicated, endoscopy-based approaches remain crucial, particularly for understanding whether *H. pylori* infection is associated with gastrointestinal diseases. Studies have noted that there are 24 species classified within the Helicobacter genus, with 35 additional species still undergoing classification.<sup>4</sup>

Undoubtedly, the most common and significant *Helicobacter* species colonizing the human stomach and associated with various diseases is *H. pylori*. Recently, *Helicobacter* species such as *H. heilmannii* and *H. felis* have also been isolated from both animal and human stomachs, showing similar symptoms to *H. pylori* and highlighting their zoonotic potential.<sup>5</sup>

Many studies have indicated that *H. pylori* infection is more prevalent among individuals living in rural areas compared to those living in urban settings.<sup>6</sup> This increased prevalence may be attributed to poor hygiene conditions as well as contact with animals.

In conclusion, while *H. pylori* is the most common and significant *Helicobacter* species colonizing the human stomach and causing various symptoms, other species are also worthy of investigation. We recommend that the study of these species should include not only histopathological methods but also molecular techniques. Research into non-*H. pylori Helicobacter* species in humans and their zoonotic characteristics could be important for public health protection.

Sincerely.

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# ETHICAL DECLARATIONS

### **Referee Evaluation Process**

Externally peer-reviewed.

# **Conflict of Interest Statement**

The authors have no conflicts of interest to declare.

# **Financial Disclosure**

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# **Author Contributions**

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

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