Editorial

The discovery of *Helicobacter pylori* has most dramatically changed, and to its best, the lives of millions of people suffering from peptic ulcer disease. A 7-day therapy regimen now offers permanent cure of this often lifelong and life-threatening disease.

In addition to outdating gastric surgery and revolutionizing medical therapy in the management of ulcer disease, the discovery of *H. pylori* has provided us with important lessons on how to handle and overcome dogmatic barriers opposing the acceptance and application of progress in the medical field. Also now, after surpassing the initial hurdles and reaching strands of glory, *H. pylori* continues to capture us in the fascinating world of ongoing scientific progress regarding basic mechanisms of the infection.

In clinical practice, *H. pylori* targeting management strategies are still in evolution, and several *H. pylori* associated clinical conditions remain an issue of debate and controversy.

The arguments chosen for this issue dedicated to *H. pylori* intend to update and stimulate those carrying the responsibility for this infection in clinical practice and will address thrilling questions such as:

To what extent and how does bacterial virulence and to what extent the genetic predisposition of the host contribute to disease outcomes?

Why does a smaller group of *H. pylori* infected patients develop clinical manifestations, and why does a much larger proportion remain asymptomatic? What can be learned from the *H. pylori* infection model for other diseases in the gastrointestinal tract of yet unknown etiology?

New key facts and challenging views are continuously emerging without yet providing definitive answers. Another fascinating sequel of *H. pylori* research is the snowball effect in the detection of new *Helicobacter* species in different locations of the gastrointestinal and hepatobiliary tracts with more questions around their role for

human pathology. Clinical topics are selected from areas of great conflict. How to deal with the dyspeptic patient in primary care? Should we adopt the 'test-end-treat' strategy? Should *H. pylori* eradication for functional dyspepsia be recommended in the specialist setting?

Another debate relates to the intriguing relationship of *H. pylori* and gastroesophageal reflux disease with all the implemented challenges whether eradication favors the incidence of gastroesophageal reflux disease or whether long-term administration of proton pump inhibitors may cause more damage to the infected gastric mucosa.

For all these clinical questions, a mass of scientific evidence is available but often with completely discordant results, and, therefore, deep knowledge of facts and careful interpretation is needed for appropriate advice.

The relationship between *H. pylori* and gastric cancer is not touched in this issue and is reserved for one of the future editions of the journal.

For clinical pragmatism, diagnostic and therapeutic standards in their current state of evolution find an important consideration together with the opening of new horizons that include the possible implementation of probiotics and the hope for new therapy solutions, eventually to be found in a vaccine. A vaccine or other novel antibiotic monotherapy are the real promises for a definitive and global eradication of *H. pylori* infection that, for all we know, is of no good for humankind. A new therapy that will become available for unrestricted use holds the promise and hope for preventing the most serious gastric pathology.

We thank all the contributors for their timely delivery and valuable contribution of manuscripts and hope that the goal to update and renew the interest in *H. pylori* and related pathologies meets the expectations of our colleagues reading this issue.

Peter Malfertheiner