Helicobacter pylori (HP) represents an important pathogen implicated in the appearance of peptic ulcer disease, chronic antral gastritis and some gastric lymphomas. The current recommended treatment for eradication of HP infection is the association of a proton pump inhibitor (PPI) with two antibiotics (clarithromycin with amoxicillin or imidazols) for 7 to 10 days (in Europe) or 14 days (in the United States); this is called the triple therapy. However, the failure rate of this therapy in eradication of HP infection can currently be up to 25%.

A recent metaanalysis, published in an important journal of internal medicine, evaluated the hypothesis that sequential anti-HP treatment (5 days of PPI + amoxicillin, followed by 5 days of PPI + clarithromycin or imidazols) is superior to triple therapy. This metaanalysis included 10 trials with 2747 patients (1363 patients allocated to sequential therapy compared with 1384 patients allocated to triple therapy). The rate of eradication of HP infection was clearly superior during sequential therapy compared with triple therapy (93.4% vs. 76.9% (P < 0.001), corresponding to a relative risk reduction of 71% and an absolute risk reduction of 16%. Compliance to treatment was approximately 97% in both treatment groups. Similar rates of adverse reactions were noted in both groups.

The main limitation of this metaanalysis is that the majority of the studies (and of patients) included were Italian – thus, generalization of results to other populations, where HP antibiotic resistance profile might be different, requires further studies.

In conclusion, sequential treatment for HP infection is superior to triple therapy and might become the standard treatment for this infection.