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## Susceptibility to antibiotics and new treatment strategies in *Helicobacter pylori* infection at a University Hospital in Rome, Italy

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A im of our study was to evaluate the utility of the culture and the subsequent susceptibility testing in a group of 50 pluritreated patients (positive to UBT) with pan gastritis. Out of 50 patients, culture and susceptibility testing was obtained in 31 patients (62%) whereas in 19 (38%) no *H. pylori* growth was detected. The first group was treated following the antibiogram results whereas the latter was empirically treated. The highest resistance rates *in vitro* were found for metronidazole (61.8%) and chlaritromycin (43.1%). The isolates showing a dual resistance to both antibiotics (50%) are recognized difficult to eradicate. Amoxycillin showed the best susceptibility (96%) and levofloxacin seemed a promising antibacterial agent. In the 31 patients' positive to *H. pylori*, the eradication rate (49%) was dependent on the number of gastric regions infected in a single patient. In the 19 patients with no growth of *H. pylori*, 11 (58%) were eradicated with empirically therapy preferably with antibiotics never taken before. The difference between the two groups (49% and 58% respectively, p=0.71) even if not statistically significant, seems to demonstrate that a successful eradication can be achieved even without antibiogram. This might occur because the bacteria in the patients empirically treated are in a less virulent phase or in a small number. The new guidelines for the cure of *H. pylori* from the Toronto Consensus Group (2016) recommend to prolong the therapy from 10 to 14 days and to pay particular attention to local antibiotic resistance and eradication patterns. The new therapeutical strategies will be reported.

## Biography

Maria Teresa Mascellino has completed her MD in Rome and specialization studies in Clinical Microbiology from Sapienza University of Rome, Italy. She works as an Aggregate Professor in the Department of Public Health and Infectious Diseases. She is responsible of the Simple Operative Unit "Microbiological analyses in immunocompromised hosts". She has published about 100 papers in reputed journals and has been serving as an Editorial Board Member of repute. She is an Editor of the book "*Bacterial and Mycotic Infections in Immunocompromised Hosts: Microbiological and Clinical Aspects*" from OMICS Group.

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