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PROBE4PYLORI®: A NEW KIT FOR THE RAPID DETECTION OF H. PYLORI AND ASSOCIATED CLARITHROMYCIN RESISTANCE IN GASTRIC BIOPSIES

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In this study an evaluation of Probe4Pylori®, a previously established PNA-FISH diagnostic test for $H.\ pylori$ clarithromycin resistance in paraffin embedded gastric biopsies was performed and compared against culture followed by E-test and PCR. The Probe4Pylori® showed very promising results with values of sensitivity (80%) and specificity (approximately 90%) for the patients harboring clarithromycin-resistant $H.\ pylori$. Due to the fact that different biopsies from the same patient were used for culture and for molecular methods, the relatively low value of sensitivity can be explained by the heterogeneous distribution of $H.\ pylori$ cells in the stomach, as for some patients only one of the biopsies contained $H.\ pylori$. Furthermore, the results from Probe4Pylori® did not seem to be affected by previous treatments with antimicrobials and proton pump inhibitors. It is also the only method tested here that allows direct visualization of different $H.\ pylori$ strains (resistant and susceptible). Future application of this kit will hopefully engage the administration of more adequate therapies to eradicate this bacterium.