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Paper Poster Session

Focus Helicobacter pylori

Surveillance of Helicobacter pylori resistance to antibiotics in France in 2014

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Background: The outcome of *Helicobacter pylori* eradication therapies is very much dependent on the antimicrobial susceptibility of the strains. Given the difficulty of offering tailored treatments in some areas, it is important to have accurate knowledge of the prevalence of *H. pylori* resistance which is evolving over time. Our aim was to perform a survey of antimicrobial resistance in France in 2014.

Material/methods: Gastric biopsy specimens obtained from patients during upper digestive endoscopy were sent to a central laboratory for *H. pylori* culture and antimicrobial susceptibility testing. A real-time PCR detecting the bacterium and the mutations leading to clarithromycin resistance was also performed.

Results: Seventy-five gastroenterologists, distributed throughout the different regions of France, enrolled 984 patients. Among the 783 patients with no previous eradication treatment, 266 (33.9%) were *H. pylori* positive. The strains showed high resistance to clarithromycin (22.2%), moderate to levofloxacin (15.4%), high to metronidazole (45.9%), very low to amoxicillin and rifamycin (<1%), and nil to tetracycline.

There were 187 patients who received a previous *H. pylori* treatment, of which 115 were *H. pylori* positive with very high resistance to clarithromycin (73.9%) and metronidazole (78.3%). None of the patients having received Pylera®-proton pump inhibitor developed resistance to tetracycline.

Real-time PCR detected all *H. pylori* patients for whom culture was positive and 30 others.

The mutations found were essentially A2142/2143G (151) while there were five A2142C and two A2142T. A double population (mutants + wild type) was observed in 21 cases.

Conclusions: This study shows that *H. pylori* resistance to clarithromycin is still increasing and already above the threshold indicating an abandon of its use. However, the progression is slower than in the previous decade probably because of a more prudent use of antibiotics including macrolides during these last years.