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LETTER TO THE EDITOR

The best is the enemy of the good: Time for a biopsy-sparing approach for Helicobacter pylori diagnosis and treatment in children in the COVID-19 era?

To the Editor,

The Joint ESPGHAN/NASPGHAN Guidelines for the Management of *Helicobacter pylori* (*H. pylori*) in Children and Adolescents recommend against a "test and treat" strategy for *H. pylori* infection, while recommending antimicrobial sensitivity testing and tailoring eradication therapy accordingly.[1] It is strongly recommended (with a high quality of evidence and 100% agreement) that "the initial diagnosis of *H. pylori* infection be performed using invasive gastric biopsy-based methods including the following: a. positive bacterial culture OR b. *H. pylori* gastritis on histopathology using the updated Sydney classification with at least 1 other positive test such as rapid urease test, or molecular-based assays where available, including polymerase chain reaction or fluorescent in situ hybridization".[1] However, in the new healthcare scenario emerged during the novel coronavirus disease (COVID-19) pandemic, elective pediatric diagnostic endoscopy has been substantially suspended, except for emergency cases,[2,3] with a minimization of the total number of procedures. As the diagnosis of *H. pylori* could hardly represent an emergency, unless in the cases of a bleeding ulcer, many children could remain undiagnosed for a long time and, therefore, untreated in the absence of antimicrobial sensitivity to guide the eradication strategy. To face this temporary difficulty in performing upper gastrointestinal endoscopy, a more extensive biopsy-sparing approach has been recently proposed for the diagnosis of celiac disease,[4] considering a temporary reduction in the threshold of TGA-IgA between 5 and 10 ULN in EMA-positive children. Similarly, we would like to bring to your attention the feasibility of a temporary biopsy-sparing approach for the diagnosis and treatment of *H. pylori* infection in children and adolescents.

We suggest that, in children likely having *H. pylori*-associated gastritis or peptic ulcer disease on the basis of the presenting symptoms, the diagnosis of *H. pylori* infection might be made by non-invasive tests, either a ^{13}C-urea breath test (UBT) or a stool 2-step monoclonal *H. pylori* antigen test, and an empiric eradication strategy could be adopted. In line with the treatment suggested by the Joint ESPGHAN/NASPGHAN Guidelines in the case of unknown clarithromycin resistance status, a therapeutic approach with high-dose proton-pump inhibitor, amoxicillin, and metronidazole or bismuth-based therapy can be attempted. In addition to the known high rate of clarithromycin resistance in Europe (25% in the pediatric population),[5] it is possible that primary resistance to clarithromycin could become even higher due to the widespread use of another macrolide antibiotic, azithromycin, in some therapeutic lines for COVID-19.[6] Undoubtedly, eradication should be assessed at least 4 weeks after completion of therapy by either a ^{13}C-UBT or a stool 2-step monoclonal *H. pylori* antigen test, as suggested by the Joint ESPGHAN/NASPGHAN guidelines,[1] and upper gastrointestinal endoscopy should be considered in case of eradication failure or persisting symptoms. We understand that this approach is far from the gold standard management recommended by the existing guidelines, but in this critical period in which the priorities have been necessarily revised, a temporary exception might be considered, only in the areas where strict adherence to the guidelines would be more harmful than beneficial, leaving symptomatic children untreated for a long time. This exception to the current guidelines may also be considered for high risk, low-income populations, for whom the pretest probability is higher and the upper endoscopy with anesthesia is an obstacle.

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DISCLOSURE

The authors have no competing interests to disclose related to this article.

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