



Infection by the *Helicobacter Pylori* microorganism is one of the most common causes of infection, with half of the cases being almost undetectable due to being asymptomatic. This microorganism is responsible for the development of gastric cancer in addition to other metabolic disorders and changes. The problem lies in the fact that in addition to the existence of asymptomatic patients, the conventional methods that currently exist can give false negatives for *H. Pylori* infection, which can aggravate cases of gastric cancer or even death.

As a result, a different approach to the diagnosis of *H. pylori* infection has been sought with the artificial intelligence of machine learning and an attempt is made to find a prediction of infection by visual inspection of the gastric mucosa. However, there is no established method of optical diagnosis of *H. pylori* infection using endoscopic imaging. In this study the objective was to find and demonstrate a reliable precision in the detection by images in the detection of the microorganism.

For the use of information for the study, two independent evaluators carried out independent searches in the most important databases and inclusion data were used where the most notable were endoscopic images without *H. pylori* infection as a control group and others with images of endoscopy with *H. Pylori* infection as a group of cases. Disagreements between evaluators were resolved by consulting a third evaluator. Subsequently, a precision meta-analysis of the diagnostic test of 8 studies was performed using criteria such as pooled sensitivity, specificity, diagnostic odds ratio, and area under the AI curve for the detection of *H. pylori* infection. The use of the AI algorithm reached a total of 82% for the discrimination between infected images against uninfected images.

With this, it can be concluded that the use of algorithms with artificial intelligence as in a field of medicine in the detection of infection of pathogenic organisms is super effective, even being able to give reliable results more quickly.

- Bang CS, Lee JJ, Baik GH. Inteligencia artificial para la predicción de la infección por *Helicobacter pylori* en imágenes endoscópicas: revisión sistemática y metanálisis de la precisión de la prueba diagnóstica. *J Med Internet Res*. 2020 Sep 16;22(9):e21983. Doi: 10.2196/21983. PMID: 32936088; PMCID: PMC7527948.