1. Initial assessment of "Gissell's stain": A novel histopathological method for the identification of Helicobacter pylori

Evaluación inicial de la "tinción de Gissell": un novedoso método histopatológico para la identificación de Helicobacter pylori

INVESTIGADORES Gian Carlos Ramirez Ubillus, Mercedes Bravo Taxa, Renier Cruz

Baca, Ricardo Neira Montoya, Eduardo Sedano Gelvet.

REVISTA

2023 Patol. Oct-Dec;56(4):219-226. doi:

10.1016/j.patol.2023.05.002. Epub 2023 Sep 4.

LINK

https://pubmed.ncbi.nlm.nih.gov/37879818/

TIPO DE CÁNCER ABSTRACTO

patología

Introduction and objectives: The histopathological identification of Helicobacter pylori using the routine method (haematoxylineosin) is not only very difficult but also has low sensitivity. Giemsa staining is often used in addition, but different protocols do not produce homogeneous results. Furthermore, the Gold Standard recommended by the European Helicobacter Pylori Study Group has been applied in very few studies, thus resulting in uncertain outcomes. Therefore, a new staining method is required to overcome these limitations. The aim of this study was to evaluate the diagnostic capacity and inter-observer agreement of "Gissell's stain". Material and methods: A cross-sectional study evaluated 99 gastric paraffin blocks from a private laboratory. Three sections were prepared from each block, and haematoxylin-eosin (HE), Giemsa and "Gissell's stain" methods were applied. The kappa statistics, sensitivity, specificity, and predictive values were calculated. Results: "Gissell's stain" obtained the highest inter-observer agreement (kappa=0.87) compared to the other two methods (HE, kappa=0.51; Giemsa, kappa=0.83). It also obtained the best sensitivity and negative predictive value (97.1% and 98.3%, respectively) compared with the other two methods (HE: 68.6% and 85.1%, respectively; Giemsa: 88.6% and 93.9%, respectively). Conclusions: Given its unique characteristics (fast, cheap, accessible, and easy to use), in addition to its statistical reliability, "Gissell's stain" has great potential for routine use in the identification of H. pylori.