# ASSESSMENT OF THE LEARNING CURVE FOR IMAGE ENHANCED ENDOSCOPY IN THE DIAGNOSIS OF HELICOBACTER PYLORI INFECTION USING A WEB-BASED TEACHING MODULE

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## SIGNIFICANCE

Gastric cancer is the fourth most common cancer worldwide with Helicobacter pylori (Hp) infection as its primary etiologic agent. Hence, eradication is of paramount importance. Image Enhanced Endoscopy (IEE) has been used in detecting premalignant lesions in the stomach, however, teaching IEE has not been standardized yet. The use of a web-based teaching module is expected to become a promising training resource in this field.

#### METHODOLOGY

This is a single-center, prospective study evaluating the effectiveness of a web-based teaching module in the diagnosis of Hp infection using IEE. After receiving a pre-test, the participants were asked to study the teaching module. Post-tests were taken immediately after the teaching module and 1 month after. The change in accuracy between the pre-test and the post-test was the primary outcome of this study.

### RESULTS

Ten gastroenterologists were invited, of which 8 participants were included in the analysis. Significant increase in accuracy between pre-test and post-test 1, and pre-test and post-test 2 were observed among all the participants (*p* value 0.00009 and 0.00003, respectively). Durability of the learning gained was also observed as demonstrated by a significant increase in accuracy between post-test 1 and post-test 2 (*p* value 0.01). Subgroup analysis according to endoscopy experience did not show a significant difference between the changes in accuracy.

#### CONCLUSION

This study has successfully demonstrated that the web-based teaching module is highly effective in teaching and improving the knowledge of the participants with regards to the detection Helicobacter pylori infection using image-enhanced endoscopy.

Keywords: Prospective study, Learning Curve, Helicobacter pylori infection, Image enhanced endoscopy