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**Conclusions:** This study shows 8.3% of the clinical isolates were carbapenemase producers. It is a significantly higher proportion which is in line with the recent studies done in India and other Asian countries. Giving false positive results for cefotaxime-Munich (CTX-M) positive and ampicillin-C (AmpC) hyper producing *Enterobacteriaceae* and false negative results for New Delhi Mettalo- $\beta$ -lactamase (NDM) producers are limitations of Modified Hodge Test.

PP 23

### **Imprint cytology: A supportive diagnostic method for *Helicobacter pylori* in dyspeptic patients**

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**Background:** Diagnosis of *Helicobacter pylori* in Sri Lanka is currently being carried out by histological interpretation of a gastric biopsy specimen. This process takes at least 3-5 days and needs specialized equipment and trained personnel. Using a combination of diagnostic methods can improve the diagnostic accuracy.

**Objectives:** To assess the usefulness of two staining methods of imprint cytology for diagnosis of *H. pylori* in gastric biopsy specimens.

**Methods:** Gastric biopsy specimens obtained from dyspeptic patients attending routine upper gastrointestinal endoscopy, were placed on glass slides to obtain imprints. The imprints were air-dried, stained with Toluidine blue and Giemsa stains and observed for the presence of *H. pylori* using light microscopy. The diagnosis was confirmed by a consultant pathologist blinded to the histology results. The sensitivity, specificity, positive predictive value (PVP) and negative predictive value (NPV) of each stain were calculated and benchmarked against histological diagnosis.

**Results:** Out of 55 patients, 7 were positive for *H. pylori* by histology. Five were positive for *H. pylori* by Toluidine blue stain and 4 by Giemsa stain. The sensitivity of Toluidine blue stain was higher than the Giemsa stain (57.1% and 42.9% respectively) while the specificity was equal (97.9%). PVP and NVP were 80.0% and 94.0% for the Toluidine blue stain and 75.0% and 92.2% for the Giemsa stain, respectively. Giemsa stain had a better discrimination for identification of *H. pylori* bacteria. The cost of carrying out imprint cytology was less than Rs. 5.00 for each stain and the results could be given in less than an hour from specimen collection.

**Conclusions:** Using imprint cytology for the diagnosis of *H. pylori* is a rapid, simple and cost effective method that can support histological diagnosis.

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