

Diagnosis and Virulence Determination of *Helicobacter pylori* Infection in Adult Dyspeptic Patients at a Tertiary Care Hospital of Pakistan

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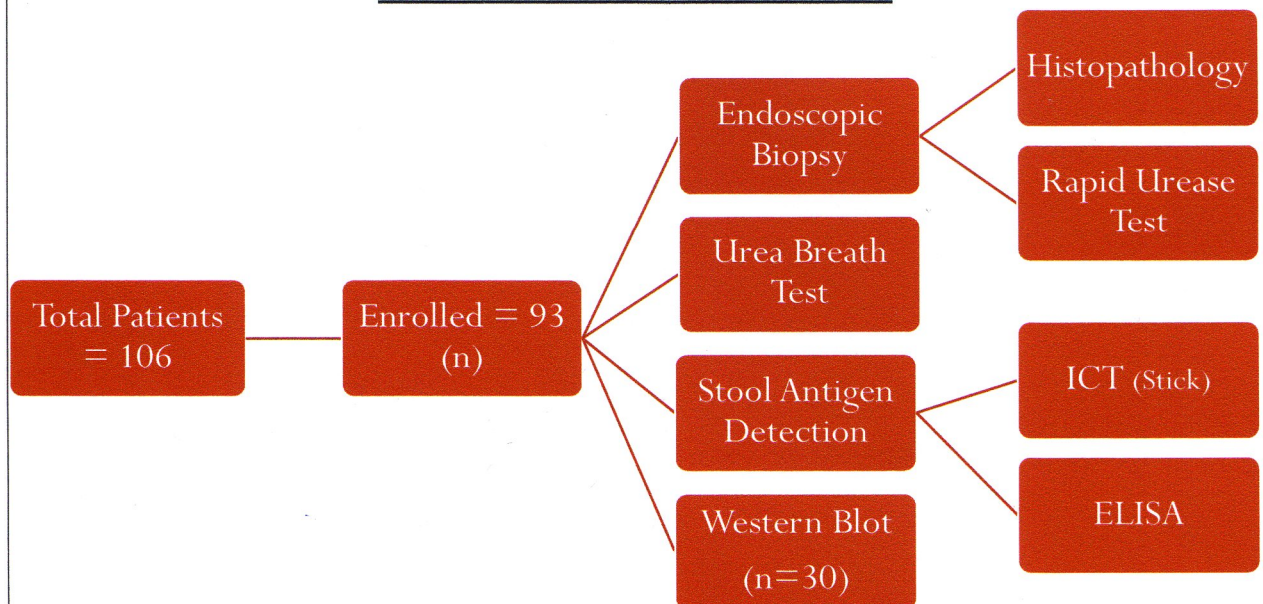
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- *Helicobacter pylori* infection occurs worldwide with more than 50% of the world population believed to be infected with this organism.
- Persistent infection with *H. pylori* is strongly associated with gastric and duodenal ulcers.
- Infected persons have a two to six fold increased risk of developing gastric cancer and mucosa-associated gastric lymphoma.
- Accurate diagnosis is essential for the effective treatment and management of infection caused by *H. pylori*.

OBJECTIVES

- To ascertain the prevalence of *H. pylori* infection in adult dyspeptic patients in our setup.
- To evaluate the performance of different non-invasive diagnostic modalities available commercially.
- To determine the frequency of the various virulence factors mostly incriminated in the pathogenesis of gastric carcinoma.

PATIENTS & METHODS



Results (n = 93 dyspeptic patients)

Prevalence ————— 55.6%

Evaluation Parameters	Histopathology	UBT	Stool Antigen (ELISA)	Stool Antigen (ICT)	Rapid Urease
Total Positive	51	48	45	44	32
Sensitivity	x	93.6%	88%	86%	73%
Specificity	x	100%	97%	100%	100%

Virulence Markers detection by Western Blot (%)					
Total Patients	CIM	CagA	VacA	Urease A	Urease B
30	94%	78%	50%	43%	43%

CONCLUSION

- There is a high prevalence of *Helicobacter pylori* infection in adult dyspeptic patients in our setup.
- Non-invasive tests like stool antigen detection have good diagnostic yield and should be incorporated in the diagnostic workup.
- Virulence markers from a large number of these patients stress the need for proper diagnosis and eradication of infection to minimize the morbidity and mortality.