GASTRO HUB®

H. pylori
RUT TEST KIT
(Rapid Urease Test Kit)

A rapid, reliable and easy-to-use test for the qualitative detection of Helicobacter pylori in gastric biopsy specimens.

The Gastro Hub® H. pylori RUT Test Kit is based on the rapid urease reaction, providing clear color-change results to assist clinicians in the diagnosis of H. pylori infection and support timely treatment decisions.

KEY FEATURES

- Rapid urease-based detection of H. pylori
- Easy-to-read color change for result interpretation
- High sensitivity and specificity
- Simple, ready-to-use test format
- Suitable for gastric biopsy specimens collected during endoscopy
- Stable and reliable performance
- Supports early diagnosis and treatment planning
- Manufactured under strict quality standards

RESULT INTERPRETATION

POSITIVE RESULT (+)

The test medium changes from yellow/orange to pink or red, indicating the presence of urease-producing Helicobacter pylori in the biopsy specimen.

NEGATIVE RESULT (–)

The test medium remains yellow/orange with no significant color change, indicating that Helicobacter pylori was not detected under the test conditions.

Note:
Test results should always be interpreted in conjunction with the patient's clinical findings, endoscopic observations, and other laboratory investigations.

HOW TO USE

1. Collect biopsy sample during endoscopy.
2. Place the biopsy specimen on the test medium.
3. Close the lid and incubate at room temperature.
4. Observe color change within 1 – 24 hours.
5. Interpret the results based on color change.

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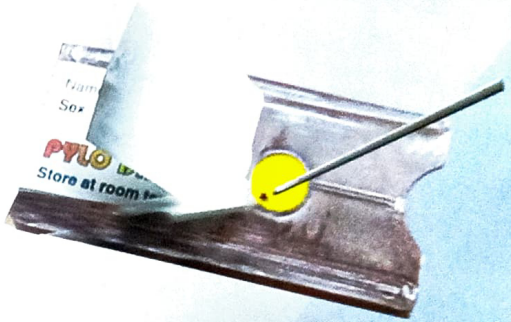
A DIAGNOSTIC KIT FOR EXTERNAL USE ONLY.

Store the Kits at Room Temp. & Dry Place

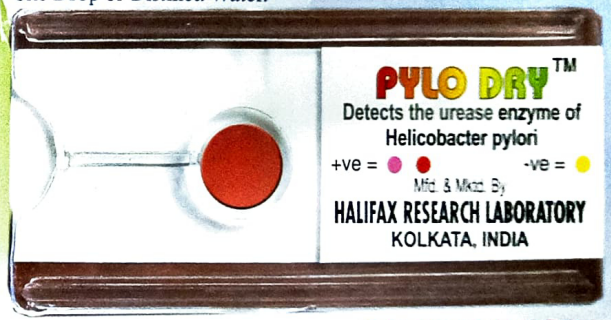
DETECTION OF UREASE ENZYME OF H. PYLORI

PYLO DRY™

● Easy to carry out ● Dependable ● Economic ● Convenient

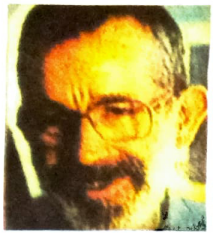


Biopsy Material Being Inserted into the dry Media & add one Drop of Distilled Water.



Test is Positive for H. Pylori

RESPECTIVE & PRINCIPAL



Dr.J.R. Warren

Fitzzerald and Murphy noted an association between urease production in the gastric mucous layer and peptic ulcer disease in 1950. Warren and Marshall carried out evaluation of all patients with dispeptic symptoms requiring upper G. I. Endoscopy and described a Campylobacter like organism in gastric mucosa in 1983. It was first named as Campylobacter pyloritidis, later changed as Campylobacter Pylori. But the observations over the next few years have revealed, this organism has very little resemblence in characterwith Campylobacter. So, in 1989 it was renamed as Helicobacter, because of its helical shape.

H. Pylori is associated with duodenal ulcer in 60-80%. H. Pylori also plays a significant role in non-ulcer disease- Presently it is considered to be the major cause of the chronic gastritis. Latest studies also show evidence of definite association of H. Pylori with lymphoma and carcinoma of the stomach. Remission and exacerbation was the accepted natural history of duodenal ulcer but since the possible role of H. Pylori was recognised,previous acid hypothesis alone is not sufficient to explain this fact,

Dr.B.J.Marshall

Bismuth compounds, antibiotics, Nitromidazole and later Omeprazole alone was found effective in eradication of H. Pylori but developed high incidence of relapse. However, dual therapy (e.g. Omeprazole & Amoxicillin) and triple therapy with various combinations of antisecretory drugs (e.g. Omeprazole, Ranitidine etc,) and antibiotics (e.g. Amoxicillin, Tetracycline and newer agent Clarithromycin) have very high eradication rates.

After eradication reinfection with H. Pylori is rare. The enzyme urease is a high molecular weight protein and very active in comparison to the urease enzyme produced by other bacteria. High concentration of urease is present in gastric mucosa. H. Pylori can tolerate a p" value even below 3.0 due to rapid formation of ammonia which raises the p" immediately.

Urease reacts with urea in the presence of water molecules and Hydrozen ions producing ammonia.

The presence of H. Pylori in the biopsy taken from gastric mucosa of the patients can be done by in vitro urease test which is of course simple and accurate.

COMPOSITION-Urea, a pH indicator, bacterostatic agent, a stabilising agent.

PROCEDURE OF THE TEST

Biopsy should be taken from the pyloric antrum adjacent to the opening avoiding the areas of erosion and ulceration. Pull up the sticker and introduce the biopsy in the exposed yellow media and add one drop of distilled water.

Place the covering sticker as before.

Urease enzyme of H.Pylori reacts with urea of the media and changes the colour from yellow to red or pink elevating pH.

OBSERVATION - Observe the colour change from yellow to red or pink at 10 minutes intervals for four hours. The observation should be continued upto 24 hours. If the colour changes from yellow to red or pink the result is positive.

PRECAUTIONS :

Agents which cause suppression of H. Pylori e.g. Antibiotics, Bismuth, Nitromidazole and high doses of antisecretory drugs, should be avoided for 3 weeks prior to this test to prevent false negative results.

Repeat endoscopy and biopsy should be done to check eradication about one month after completion of the regimen.

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