

***Helicobacter pylori* stool antigen testing now available at Danbury Hospital**

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Helicobacter pylori is currently recognized as one of the most common and medically important pathogens worldwide. Strongly associated with peptic ulcer disease (duodenal and gastric) and chronic active gastritis, *H. pylori* is also an independent risk factor for gastric cancer and primary malignant lymphoma of the stomach. Chronic *H. pylori* infection may be associated with idiopathic thrombocytopenic purpura (ITP). Eradication of *H. pylori* from gastric mucosa has shown improvement in some ITP patients.

There are several methods of diagnosing *H. pylori* infection including invasive testing using mucosal biopsies obtained during endoscopy (culture, histology and rapid urease test) and non-invasive procedures (serology, urea breath tests and stool antigen tests).

Historically, testing for *H. pylori* antigen in stool has been a send out test from Danbury Hospital to a reference lab. Results of the test were not usually available for 5 days. The Microbiology section of the Danbury Hospital Laboratory recently validated a rapid immunoassay for *H. pylori* antigen in stool and is pleased to announce its availability. Turn-around time of results is considerably reduced.

The Meridian Bioscience Immunocard STAT! HpSA is an in vitro qualitative rapid lateral flow immunoassay that detects *H. pylori* antigen in stool specimens. The sensitivity of Immunocard STAT! HpSA is 90.6% with a specificity of 91.5% for diagnosis of *H. pylori*. Tests performed on samples obtained four weeks post eradication therapy had a sensitivity of 95.4% and specificity of 100%. Ingestion of antimicrobials, proton pump inhibitors and bismuth preparations within two weeks prior to *H. pylori* stool antigen testing may cause false negative results. Watery stools may also give false negative test results.

Stool specimens should be submitted in a clean, dry container without preservatives or transport media. Rectal swabs are not acceptable. The stool specimen may be refrigerated (4-8° C) for up to 72 hours if immediate transport is not feasible.

Please direct any questions to Microbiology at 203-739-7305 or to Dr. Jessica Dodge, Medical Director of Microbiology at 203-739-7034.

Laboratory Announces Closure of Germantown Satellite

Effective Wednesday, July 25, 2010, the Specimen Collection Facility at 41 Germantown Rd, Danbury is closed. Please direct patients to the Patient Service Center at 79 Sandpit Rd. Appointments may be made by calling 203-749-5742.

Urinalysis Reflex Testing

Jessica Dodge, M.D., Director of Microbiology Laboratory

Urinalysis reflex testing is a strategy used to reduce unnecessary urine microscopic examinations and urine cultures. Available at Danbury Hospital since April 2008 and frequently ordered by the Emergency Department, urinalysis reflex testing only applies to patients greater than two years old. An American Academy of Pediatrics guideline recommends urine cultures to rule out urinary tract infections in children.

When a urinalysis reflex test is ordered, a macroscopic exam (dipstick) is performed. If any of the following criteria are met, a microscopic exam of the sediment and a urine culture will be performed:

Nitrite positive

Protein positive (including trace)

Leukocyte esterase positive (including trace)

Blood 1+ or more

Urinalysis reflex testing should detect the vast majority of urinary tract infections. In a recent study of 122 positive urine cultures ($\geq 100,000$ CFU/mL) from Danbury Hospital inpatients, reflex testing would have detected 121 UTIs (99.2%).

The preferred specimen is a first morning, clean-voided urine because it is the most concentrated. Specimens should be collected and sent to the laboratory in a sterile urine cup with the lid securely snapped into place. Urine specimens must reach the laboratory within 2 hours of collection unless refrigeration is possible. If refrigerated, urine must reach the lab within 8 hours of collection. Standard labeling requirements must be adhered to (patient's first and last name, medical record number and/or date of birth, initials of person handling specimen and date and time of collection).

Questions regarding urinalysis reflex testing may be directed to the Microbiology section at 203-730-7305.

Reportable Diseases and Laboratory Reportable Significant Findings

As required by Connecticut General Statutes Section 19a-2a and Section 19a-36-A2 of the Public Health Code, all clinical laboratories that receive a primary specimen or sample, which yields a reportable laboratory finding, shall be responsible for reporting such findings within 48 hours to the Department of Public Health.

The lists of Reportable Diseases and Laboratory Reportable Significant Findings are revised annually by the Department of Public Health (DPH) and can be accessed via this link:

http://www.ct.gov/dph/lib/dph/infectious_diseases/ctepinews/vol30no1.pdf.

“Previous issues of Technically Speaking can be accessed at

<http://www.danburyhospital.org/About-Us/Publications/Technically-Speaking.aspx>