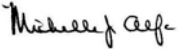




CLINICAL PRACTICE CHANGE

Date: December 13, 2012
To: All Medical Staff
From: Dr. Michelle Alfa, Medical Director Clinical Microbiology Discipline,
Diagnostic Services of Manitoba,

Re: ***Helicobacter pylori* Diagnostic Testing for Children ≤6 Years of Age**

TAKE HOME MESSAGE:

Stool testing for *Helicobacter pylori* antigen is available for children ≤6 years of age.

Helicobacter pylori causes gastric antrum infections in children as well as adults. The testing methods for *H. pylori* include:

- Urea ¹³C Breath Test (UBT)
- Gastric biopsy: rapid urease, culture or pathology
- Stool Antigen Test (SAT)
- Serology

UBT and SAT are considered the best non-invasive diagnostic tests currently available for the detection of *H. pylori*. Gastric biopsy is required if organism antimicrobial susceptibility testing is needed for patients who fail to respond to therapy or if histopathology is needed to rule out other etiologies. The UBT has a sensitivity of 88-95% and a specificity of 95-100%. The SAT has a sensitivity and specificity of 94% and 92%, respectively. The UBT cannot be performed in children ≤6 years of age as the results are often unreliable¹. The SAT is the recommended non-invasive test in this age group. For patients using proton pump inhibitors (PPIs), the PPIs should be discontinued for 2 weeks (if possible) prior to performing the UBT or SAT¹.

Both UBT and SAT are recommended as appropriate for following the response to therapy (test done 4 weeks after completion of therapy) in both adults and children. **Note:** for children ≤6 years of age only the SAT test can be used for following response to therapy¹.

This memo is to make clinicians aware that the SAT is available for those sites whose microbiology services are provided by DSM Microbiology. The stool sample is collected into a sterile container (e.g., sterile urine specimen container) and submitted along with the appropriate DSM Clinical Microbiology Requisition to their local DSM laboratory. The SBH requisition is available at <https://apps.sbgh.mb.ca/labmanualviewer/viewPdf?url=/document/56>. See attached page with an example of a completed requisition. The specimen must be held in the fridge (2-8°C) until transported to the Microbiology Laboratory at the St. Boniface Hospital (SBH) site. The SAT test can be performed as long as the transport time does not exceed 7 days. The test TAT is 1 day from the time of receipt of the specimen in the SBH lab.

If you have any questions please contact Dr. Michelle Alfa at (204) 237-2105.

References:

1. Malfertheiner P, et al. Management of *Helicobacter pylori* infection – the Maastricht IV/Florence Consensus Report. Gut 2012;61:646-664.



Physician Alert



CLINICAL MICROBIOLOGY LABORATORY TEST REQUISITION



St. Boniface Hospital
204-237-2484

Health Sciences Centre
204-787-1273

Westman Laboratory
204-578-4482

PLEASE COMPLETE THE INFORMATION BELOW - PRINT CLEARLY

PHN/Health Care Number 987654321		Chart# 12345	Visit# 11111111	<input type="checkbox"/> Copy to
<input type="checkbox"/> M Patient Legal Name (Last) <input checked="" type="checkbox"/> F Mouse		(First) Minnie	(Initial)	Name _____
		Birthdate DD 01 MM 01 YY 2010		Physician Code _____
Ordering Address/Location ACF pediatrics		Physician Code 1234	Address _____	
Report Address if Different		Fax # _____		
		Full name, address & fax number MUST be provided		
Ordering Physician/Practitioner Dr. B. Black		Date Specimen Collected DD 14 MM 12 YY 2012	Time (24 h) 11:00 am	Collector

Diagnosis/Relevant Clinical Information:

<input type="checkbox"/> UTI symptoms (any of: flank pain, frequency, dysuria)	<input type="checkbox"/> Transplant	<input type="checkbox"/> Immunocompromised
<input type="checkbox"/> Animal bite	<input type="checkbox"/> Pregnant	<input type="checkbox"/> Penicillin allergy
<input type="checkbox"/> Post surgical	<input type="checkbox"/> History MRSA (+)	<input type="checkbox"/> Recent travel (last 2 yrs)

Human bite Diabetic Necrotizing fasciitis PID

Diagnosis Information: query H. pylori infection

Antibiotic(s) - specify all antibiotics currently being received:
None

ONE SPECIMEN PER REQUISITION ONLY STAT/URGENT (Microscopy only, where applicable)

Blood and Other Sterile Fluids <input type="checkbox"/> Blood culture <input type="checkbox"/> Peripheral draw <input type="checkbox"/> Central line draw Site (specify) _____ <input type="checkbox"/> CSF Test: <input type="checkbox"/> Bacterial culture - aerobic <input type="checkbox"/> Bone marrow <input type="checkbox"/> Bacterial culture - anaerobic <input type="checkbox"/> Fluid (site) _____ <input type="checkbox"/> Fungal culture <input type="checkbox"/> Mycobacterial culture (AFB) Other (specify site & test) _____		Respiratory Tract Specimens Upper Respiratory Tract <input type="checkbox"/> Throat <input type="checkbox"/> Mouth culture (yeast only) <input type="checkbox"/> Nose culture (S. aureus carrier only) <input type="checkbox"/> Pertussis (nasopharyngeal swab, suction) <input type="checkbox"/> Other (specify site & test) _____ Lower Respiratory Tract Test: (must indicate Specimen/Source) <input type="checkbox"/> Bacterial culture - aerobic <input type="checkbox"/> Sputum expectorated <input type="checkbox"/> Fungal culture <input type="checkbox"/> ETT suction <input type="checkbox"/> Mycobacterial culture (AFB) <input type="checkbox"/> Bronchial wash <input type="checkbox"/> Legionella <input type="checkbox"/> BAL <input type="checkbox"/> Lung biopsy/aspirate <input type="checkbox"/> Other (specify site & test) _____	
Urinary Tract Specimens <input type="checkbox"/> MSU Test: <input type="checkbox"/> Bacterial culture - aerobic <input type="checkbox"/> Catheter <input type="checkbox"/> Suprapubic aspirate <input type="checkbox"/> Cystoscopy <input type="checkbox"/> Nephrostomy Other (specify site & test) _____		Wounds/Skin/Abscesses/Surgical Specimens/Tissues Specify site: _____ <input type="checkbox"/> Swab Test: <input type="checkbox"/> Tissue <input type="checkbox"/> Bacterial culture - aerobic <input type="checkbox"/> Biopsy <input type="checkbox"/> Bacterial culture - anaerobic <input type="checkbox"/> IV catheter tips <input type="checkbox"/> Fungal culture <input type="checkbox"/> Ulcer <input type="checkbox"/> Mycobacterial culture (AFB) <input type="checkbox"/> Aspirate <input type="checkbox"/> Bone chips <input type="checkbox"/> Skin scrapings <input type="checkbox"/> Foreign body Other (specify site & test) _____	
Gastrointestinal Tract Specimens <input type="checkbox"/> Stool culture <input type="checkbox"/> H. pylori (biopsy only) <input type="checkbox"/> Clostridium difficile toxin <input type="checkbox"/> Stool - Mycobacterial culture (AFB) <input type="checkbox"/> Gastric - wash Mycobacterial Culture (AFB) Other (specify site & test) Stool: H. pylori Antigen Test		Eyes and Ears Eyes <input type="checkbox"/> Left <input type="checkbox"/> Conjunctiva Test: <input type="checkbox"/> Right <input type="checkbox"/> Cornea <input type="checkbox"/> Bacterial culture - aerobic <input type="checkbox"/> Fungal culture Ears <input type="checkbox"/> Left <input type="checkbox"/> External canal <input type="checkbox"/> Right <input type="checkbox"/> Perforated eardrum <input type="checkbox"/> Middle ear drainage/fluid Other (specify site & test) _____	
Genital Tract Specimens Vagina <input type="checkbox"/> Bacterial vaginosis/Vaginitis <input type="checkbox"/> Trichomonas vaginalis Vaginal/Rectal <input type="checkbox"/> Gp B Strep Screen (pregnant only) Cervix <input type="checkbox"/> N. gonorrhoeae culture Urethra <input type="checkbox"/> N. gonorrhoeae culture External Genital Specimen <input type="checkbox"/> Vulva <input type="checkbox"/> Penis <input type="checkbox"/> Bacterial Culture - aerobic		Antibiotic Resistant Organisms MRSA <input type="checkbox"/> Nose <input type="checkbox"/> Other (specify site) _____ VRE <input type="checkbox"/> Rectal <input type="checkbox"/> Other (specify site) _____	
Other Specimens/Tests/Special Requests Specimen _____ Specify site _____ Test(s) (specify) _____ Facility: Form #			

REV/October 15, 2012