



Clinical Practice Change: Clinical Microbiology

Date: April 8, 2013
To: All Medical Staff
From: Dr. Michelle Alfa, Medical Director Clinical Microbiology Discipline,
Diagnostic Services of Manitoba,
Michelle Alfa
Re: *Helicobacter pylori* Diagnostic Testing for Children ≤16 Years of Age

TAKE HOME MESSAGE: EXPANDED AVAILABILITY: Effective immediately, stool testing for *Helicobacter pylori* antigen is available for children ≤16 years of age.

On Dec 12, 2012 DSM initiated *Helicobacter pylori* stool antigen testing (SAT) for children ≤6 years of age. Due to a number of physician requests, this test availability has been expanded and is now available, effective immediately, for **children ≤16 years of age**.

Background:

Helicobacter pylori causes gastric antrum infections in children as well as adults. Urea breath testing (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 SAT has a sensitivity and specificity of 94% and 92%, respectively. The UBT has a sensitivity of 88-95% and a specificity of 95-100%. 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 or false-positive and false-negative results may occur.

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

