Lab Focus

November 2002– periodic insert to 'Scope *from Fairview Clinical Laboratories*

Sound bites. . . .

DIAGNOSIS OF HYPOGLYCEMIA

We frequently receive questions about testing for the diagnosis of hypoglycemia in patients without diabetes mellitus. In the healthy-appearing patient, the supervised 72-hour fast, conducted in a hospital following standardized procedures, is the classic diagnostic test for hypoglycemia.

However, every effort should be given to documenting low level(s) of plasma/blood glucose (especially when the patient experiences symptoms) prior to considering the supervised fast. Furthermore verifying a low plasma glucose at the time of spontaneous symptoms should be interpreted with the knowledge that some normal persons (especially women) may have plasma glucose levels below 50 mg/dL while fasting.

Once low levels of glucose coincident with symptoms have been documented or if there are questions concerning other relevant procedures, we strongly recommend consultation with an endocrinologist or other physician with experience in diagnosing hypoglycemia.

The five-hour (or otherwise extended) oral glucose tolerance test should not be used as a diagnostic test for hypoglycemia.

Reference: Hypoglycemic Disorders, FJ Service. NEJM, 1995; 332:1144-52.

Michael W. Steffes, MD, PhD
Medical Director, Clinical Pathology
Fairview-University Medical Center

TEST/SPECIMEN UPDATES:

Renal insufficiency interferes with the **B-type natriuretic peptide** (BNP) assay. If the creatinine is <2.5 mg/dL, there is no interference. Between 2.5 mg/dL and renal insufficiency, there may be interference.

Effective Oct. 1, University Endocrine Lab moved several tests to the Bayer Centaur. Several tests will no longer accept plasma as an alternate specimen type.

- Serum is the only specimen type acceptable for the following tests: **FSH, LH, prolactin, Free T4, T4, TSH, alpha fetoprotein (non-maternal), cortisol, folic acid and ferritin**.
- However, **TSH** and **Free T4** are still accepted on plasma at Fairview Ridges and Fairview Southdale hospitals.

CA27.29 testing is now performed daily Mon-Fri.

Identifying Viruses Can Reduce Morbidity, Mortality

Viral respiratory diseases in children and adults cause significant morbidity and mortality, specifically in young children and older adults. Viruses cause approximately 75 percent of acute respiratory illnesses. With the availability of anti-viral therapy for some viruses, determination of a viral etiology for respiratory infections is important. Early and appropriate use of effective antiviral therapy can decrease morbidity and mortality associated with lower respiratory tract viral infections.

Influenza screening
This year a new rapid screening assay for influenza identifies and differentiates both influenza A and influenza B, utilizing an enzyme immunoassay (EIA) method. Specimens of choice are nasopharyngeal washes, bronchoaveolar lavages, nasal aspirates, nasopharyngeal swabs, or throat swabs. One advantage of this new assay is that both the rapid influenza and the rapid respiratory syncytial virus (RSV) can be performed on one swab processed in 1-2 mL of viral transport media. Collection of a second swab is recommended for a follow up Respiratory Viral Culture, particularly on samples with negative rapid antigen results.

Testing will be performed at all hospitals including both campuses of Fairview-University and at the following clinics: Fairview Oxboro Clinic, Fairview Ridges Clinic, Fairview Egan Clinic, Fairview Highland Park Clinic and Fairview EdenCenter Clinic.

RSV screening
A rapid screening assay for RSV is available, as in prior years. Specimens of choice are nasopharyngeal washes or swabs, and throat swabs. Because the Viral Culture is still considered the gold standard for the identification of respiratory viruses, we recommend collecting two swabs initially. One swab is used for the rapid screen and a second swab for follow-up culture. The site laboratory should transfer culturette swab to transport broth. Cultures for RSV should be sent in viral transport media to the Virology Laboratory as soon as possible because this virus is very labile at room temperature and/or if a swab is allowed to dry out. If a bronch wash is submitted for screen and/or culture, collect a minimum of 2 mL.

Testing will be performed at Fairview Lakes Regional Medical Center, Fairview Ridges Hospital, Fairview Southdale, and Fairview-University Medical Center, University campus.

Contact the Virology Laboratory at 612-273-5195 with questions.

Karin Libby
Laboratory Manager
Hank Balfour, MD
Medical Director

Reduced Discharge Reports Designed to Improve Physician Satisfaction

It is important that inpatient test results completed after discharge are reported to and reviewed by a physician. To help meet our goal of improving physician satisfaction, beginning the week of Dec. 3, we will reduce the volume of inpatient discharge reports at Fairview-

University. Pending feedback from other sites, the changes will be implemented at the other metro hospitals in January.

What prints?
We now have the ability to print reports containing only tests ordered or performed on the day of discharge. Additional reports will print as other pending tests are reported after the discharge date. If all tests have been completed before the discharge date, no report prints.

Estimated magnitude of the reduction:
- The number of patient reports printing per day should decrease by more than 50 percent on the Riverside campus.
- The number of pages printing per day should decrease by more than 75 percent on the Riverside campus.
- Reductions in pages printed or faxed at the University campus should be similar or even greater.

As you can see, we'll be generating a lot less paper, and only sending reports that contain new information. We hope that this will make the reports more manageable and more useful.

Sue Kammann, Clinical Analyst
Laboratory Information Systems

Gonorrhoeae Test Recall May Prompt Retesting of Some Patients

An Aug. 30 Food and Drug Administration recall of certain test kits for gonorrhoeae may create the need to retest some patients. The FDA announced that Abbott Laboratories has recalled several lots of laboratory test kits distributed between Jan. 11 and June 24. The Abbott LCx® assay for *Neisseria gonorrhoeae* failed to meet the analytical sensitivity described in the product insert, and there is a possibility of false negative results for specimens tested with the affected lots.

The Clinical Microbiology Laboratory transitioned to the Gen-Probe nucleic acid amplification assay on April 5; therefore, any patient samples sent since then are not affected by the recommendation to retest patients with negative tests for *Neisseria gonorrhoeae.*

Who needs a retest?
Physicians, clinics and other health-care facilities should offer retesting to patients whose test results were negative for *Neisseria gonorrhoeae*. This does not affect testing for *Chlamydia trachomatis*.

Only a small percentage of patients with gonorrhea should be affected by the test results under question, since presumably only those with low levels of bacterial infection could be misdiagnosed.

Fairview Laboratories sent letters detailing the problem along with a list of potentially affected patients to all Fairview hospitals and clinics the week of Sept. 23. The ordering physician must determine whether the patient should be contacted regarding retesting. The recall applies to patients seen in emergency rooms and clinics at all sites.

How to contact patients
Risk Management has provided the following guidelines: Providers may contact patients by telephone or by mail. If providers send a letter, clinicians should not use the actual test name in case someone other than the patient actually opens and reads the letter. Clinicians should consider using a statement similar to the following:
"You were seen at _____ (facility/clinic) on _____ (date). One of your laboratory tests performed on that date might have given an incorrect results because a test kit used was later recalled by the manufacturer. We encourage you to contact your physician for further details. We will offer a repeat test at no charge to you."

If the provider chooses to make a telephone call, the caller should not give any information more detailed than above unless talking to the actual patient. Callers may leave a message on an answering machine using the above phrasing.

The Clinical Microbiology Laboratory will offer GC PCR repeat testing at no charge to patients. To prevent charging the patient for an additional clinic/ER visit if this is the only reason the patient is returning, we recommend the following: The clinic contacts the patient and generates a requisition, which will be held in the laboratory pending patient arrival. When the patient comes to the laboratory, the patient will not be charged for a clinic visit. If staff collects a urine sample using the Gen-Probe collection kit, a physician would not have to see the patient.

Rick Panning is negotiating with Abbott to pay clinic or ER charges when appropriate. The Fairview-University Microbiology Laboratory is tracking patient retesting and the clinics are tracking any additional patient visits for recharge.

Thank you for your understanding of this unanticipated inconvenience.

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Rick Panning
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