

Volume #8

Issue # 3

September 2010

BNP (Brain Natriuretic Peptide) and N-Terminal Pro-BNP

BNP is released from the heart wall in response to increased cardiac pressure as a pro-peptide and is broken down to BNP and NT-proBNP. Either peptide can be used to help diagnose and grade the severity of heart failure. BNP and NT-proBNP levels can help doctors differentiate heart failure from other problems such as Chronic Obstructive Pulmonary Disease as well as help manage effective therapy.

While BNP and NT-proBNP will rise with left ventricle dysfunction and can be measured, they are not interchangeable and the test results cannot be directly compared. NT-proBNP levels are substantially greater than BNP levels in patients with cardiac disease due to the longer half life of NT-proBNP in circulation. Physicians Laboratory Services offers the BNP test (#7890) which requires 1.0 mL of EDTA plasma, frozen.

Celiac Disease - Endomysial and tTG Antibodies

IgA class anti-endomysial antibodies are very specific, occurring only in celiac disease and dermatitis herpetiformis (DH). These antibodies are found in approximately 80% of patients with DH and in essentially 100% of patients with active celiac disease. Titers decrease or become negative in patients on a gluten free diet and reappear upon gluten challenge. The test for anti-endomysial antibodies is subjective and complicated, involving serial dilutions of patient's serum which is examined under a fluorescent microscope. Recently, the endomysial antigen targeted by the anti-endomysial antibodies was identified as the protein cross-linking enzyme known as tissue Transglutaminase (tTG). In clinical trials, the correlation of tTG to endomysial IFA assay was demonstrated to be close to 100%. This test is not subject to interpretation like the endomysial IFA test. The tTG ELISA measures the same thing that the endomysial IFA is measuring, but the method is more sensitive and specific and not subject to interpretation. **tTG is essentially measuring endomysial antibodies, is more reproducible and should be ordered in place of Endomysial antibodies when Celiac Disease is suspected.**

Why do we measure Urine Creatinine on Drugs of Abuse screens?

The most common method of sample manipulation when a drug is present is intentional ingestion of liquids to make the urine more dilute. Many illicit web sites tout this as an effective tool to make a drug screen negative. A study performed in 1993 at Medtox® Laboratories, Inc. demonstrated that dilute urine samples were over 5 times more likely to have drugs of abuse present than normal

concentrated urine samples. Physicians Laboratory Services measures urinary creatinine as a tool to assess potential over hydration and dilute specimens. In healthy individuals, urinary creatinine values are typically >20 mg/dL. Samples with creatinine between 10 – 20 mg/dL are suspect, while samples with creatinine values of <10 mg/dL are indicative of over consumption of liquids prior to sample collection. A text message is attached to all specimens that test as "dilute" which recommends caution when interpreting the result. A repeat collection is recommended. Gregory Post, Ph.D.

Test #202 CBC + Automated Differential Test #4201 CBC Only Test #294 H&H Panel

A CBC (Complete Blood Count) is available with and without an Automated Differential (absolute numbers and percentages of WBC). Both tests are now listed on the requisition. It is our responsibility to perform the test requested, so please do not write "CBC" on the requisition because we would need to contact you for clarification. We are also offering Test #294 which is only a Hemoglobin and Hematocrit. Specimen requirements for each of the above tests are 5.0 mL Whole Blood EDTA. Tube should be completely filled.

New Microbiology Critical Value

A positive Shiga toxin, E. coli result (test #675) is now considered a critical value. Antibiotic treatment of these patients is contraindicated, and timely reporting of positives is essential to patient care

New Test Numbers

Test #667 Direct Coombs Test (DAT)
Specimen: 5.0 mL Whole Blood EDTA
Storage: Refrigerated 72 hrs.
Performed: Mon – Sun. UNMC Reg. Lab;
Reported 2 days
CPT code: 86880
Cost: \$20.00
Effective September 1, 2010 current test #591 Direct Coombs Test (DAT) will be discontinued.

Test #8132 Abilify (Aripiprazole)
Specimen: 2.0 mL Serum Non SST or Heparinized Plasma
Storage: Ambient 3 days.
Performed: Daily - Reported 7 days
CPT code: 82542
Cost: \$80.00
Effective September 1, 2010 current test #9347 Abilify will be discontinued.

HIV Rapid (SUDS) test for HIV exposure of personnel will be given a separate test number for Omaha clients and Lincoln clients. The new test numbers are:

Omaha Test #695
Lincoln Test #3028

Specimen requirements, CPT codes and cost remain the same. **Effective September 1, current test #681 HIV Rapid (SUDS) will be discontinued.**

A new Bacterial Vaginosis Panel by Real Time PCR has been created, and the test # is 7670. The panel includes the following new components:

Gardnerella vaginalis
Atopobium vaginae
Megasphaera species (Type 1 and 2)
Bacterial Vaginosis Associated Bacteria 2 (BV AB2)

Specimen: One Swab® or Thin Prep
CPT codes: 87511, 87798 x 3
Cost: \$140.00

Effective September 7, current test #7634 Bacterial Vaginosis Panel by Real-Time PCR will be discontinued due to component changes.

Website Additions

Please visit our Website, www.physlab.com to see the changes we have made. For your convenience, three new "tabs" are on the home page.

1. **SUPPLY ORDER**
Order "on line". Complete form and submit.
2. **TEST DIRECTORY**
Goes directly to the Test Directory.
3. **PAY MY BILL**
Credit card payment for patients and clients is now available.

C.difficile Toxin Specimen Requirement

Only "liquid" stool specimens should be submitted for C. difficile toxin testing. Formed stools may result in misleading test results. Do not order this test for "test of cure". "Cure" is determined by cessation of symptoms only, as many patients can relapse, become re-infected, or remain colonized for long periods of time after treatment. See further information at Website www.cdc.gov

Specimen Stability Changes

Test #519 Cryptococcus Antigen, Serum
Store: Refrigerated 3 days; Frozen indefinitely.
Transport: Frozen

Test #859 Cryptococcus Antigen, CSF
Store: Refrigerated 3 days; Frozen indefinitely.
Transport: Frozen

Test #1719 Osmotic Fragility, Erythrocyte
Whole Blood Lithium or Sodium Heparinized specimen and a minimum of two unfixed, air dried, and unstained blood smears must be received within 24 hrs of collection and testing will be performed within 48 hrs of collection.
Store and Transport: Ambient
Note: Specimens older than 48 hrs are no longer acceptable.

Test #7248 Hepatitis B Virus (Viral Load)
Ultrasensitive Quantitative RT-PCR
Remove serum or EDTA plasma from cells within 6 hours of collection. Once removed:
Store: Ambient 3 days, Refrigerated 7 days or Frozen 6 weeks.
Transport: Frozen

Test #7301 Hepatitis C Virus Genotyping by PCR and Sequencing

Remove serum or EDTA plasma from cells within 6 hours of collection. Once removed:
Store: Ambient 3 days, Refrigerated 7 days or Frozen 4 months.

Transport: Frozen
Test #7888 Hepatitis C Virus RNA Qualitative PCR
Remove serum or EDTA plasma from cells within 6 hours of collection. Once removed:
Store: Ambient 3 days, Refrigerated 7 days or Frozen 4 months.

Transport: Frozen
Test #9410 Ionized Calcium
An "**UNOPENED**" serum separator tube is required for this test. Opening the tube and pouring off the serum will compromise test results. If other tests are ordered that require serum, additional serum separator tubes must be obtained.

Client Requests

1. *Can you provide numeric labels on the Anatomic and Cytology requisitions like the labels on the Clinical requisitions?*

YES. In addition to the required full patient's name and specimen source on the label, we have provided numeric labels to be affixed to the specimen as an additional identifier. These labels are on the Anatomic and Cytology requisitions. You will receive the new reqs. upon your next order. Also you will notice all of the new requisitions, including Clinical, are now "carbonless".

2. *When we request a report to be faxed to another provider, why don't you include the physician's name as well as the fax number on the report?*

Only the information that you provide in "Requisition Comments" can be included on the report. If the "Requisition Comment" only has "Fax to 402 123-4567"; that's the only information that will be on the report.

Postal Service Recommendations

Format all lines of the address with a uniform left margin. Uppercase letters are preferred on all lines of the address block. Punctuation should be omitted in all lines of the address.

First line should be the Recipient Line (to whom the mail is going to). The Attention Line is placed above the Recipient Line, that is, above the name of the firm to which the mailpiece is directed.

Second line should contain the Numeric location and Street Name. If applicable, the street name should be abbreviated, e.g. ST, AVE, BLVD. Also any *Directionals* (South, North, East, Southwest etc.) should be abbreviated by one or two letters, e.g. S, N, E, SW, respectively. If the address has two consecutive words that could be abbreviated, abbreviate the second word. For example, 123 MAIN AVENUE DRIVE, abbreviate DR. *Secondary Address Units*, such as apartment or suite, should be APT or STE and placed at the end of the address line.

Third line should be City, State and Zip +4code. States should be abbreviated using the standard abbreviation. There should be one space between the city and state, and two spaces between the state and zip+4 code.

For more detailed explanations, log on to <http://zip4.usps.com/zip4/welcome.jsp>.