PHYSICIANS LABORATORY SERVICES

TECHNICAL BULLETIN

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Volume 5 **Issue 4** **December, 2007**

TEST AVAILABLE "In House"

As of December 10, D-Dimer will be performed at Physicians Laboratory, and the test number is 238.
Specimen requirements, storage, CPT code and cost will remain the same; however, ***all results will be treated as "critical" and called upon completion.***

A reference range of 0.43 - 2.39 mgL/FEU (Fibrinogen Equivalent Units) has been established which shows that normal individuals may exhibit low levels of D-Dimer in their blood. In addition, other physiologic states such as: DIC (Disseminated Intravascular Coagulation), trauma, post surgery, hematoma, pregnancy, cancer, diabetes, old age, arterial thrombosis, thrombolytic therapy and the general hospitalized patient may exhibit an elevated D-Dimer. For this reason, a positive D-Dimer test does not confirm the presence of DVT (Deep Venin Thrombosis) or PE (Pulmonary Embolism). Further testing of the positive patient is required.
Patient values below a cut-off value of <1.00 mgL/FEU are considered negative and may be used to rule out DVT or PE. In other words, this test is useful as a negative predictor.

Questions: Contact Stephanie Gillespie
Omaha Hematology Supervisor

CA125 NEW METHODOLOGY

Effective January 1, 2008, Physicians Laboratory Services will be changing methodology used to quantify CA 125 antigen in serum. Comparison studies between the old and new methodology will be reported until January 1, 2008.

The new assay demonstrates a higher reference range increasing from <22 U/L to <36 U/L. With either assay, CA125 is not recommended as a screening tool. A value below the cutoff limit does not indicate the absence of residual ovarian cancer.

Questions: Contact Jan Nelson
Omaha Chemistry Supervisor

COMING JANUARY 8th !!!!

Our clinical reports will soon have a whole new look. The new format will be more "user friendly" and provide more information to the physician by having an "office tracking" box for reviewing the report and indicating any follow-up.

SPECIMEN LABELING

We have noticed a significant increase in unlabeled or labeling discrepancies with clinical, anatomic and cytology specimens. This causes testing to be delayed while discrepancies are resolved. Labeling discrepancies are very serious, increasing the risk of reporting results on the wrong patient. Some specimens must be rejected to avoid this error. We would appreciate your compliance with the following:

1. **Please use the patient's full, legal name on the requisition.**
   Do not use nicknames.
2. **The patient's identification on the specimen must match the patient's identification on the requisition.**
3. The complete date of birth must be on the requisition.
4. The first and last name of the requesting physician must be present.
5. **For Microbiology (cultures), Cytology (Pap Smears and fluids) and Histology (tissue) the source of the specimen must be indicated on the container and requisition.**

CAUTION: RAPID MONO TEST KITS

For our clients performing "mono" tests in their office, there are several kits that are on the market that were manufactured in China. These have not been FDA approved for patients under the age of 18. Please read the package insert section "Limitations of Testing" to see if it has been validated for patients less than 18 years of age.

TESTING FOR ANTI D AND ADMINISTERING THE RH Immune Globulin

Before giving an injection of Rh Immune Globulin to an Rh negative (anti-D) pregnant female, you need to demonstrate the patient has not been sensitized to the D antigen.
This may be done by ordering any OB Panel or Profile , Antibody Screen (test #589), RBC Antibody Identification (test # 590), or RBC Antibody Titer (test #501).
After the injection is given, passive Anti D will be detectable in the patient's serum and remains detectable for 6 weeks or longer. The newest formulation of Rh Immune Globulin, which will be available in 2008, boasts an even longer half life and that will impede antibody detection and identification.

Questions: Contact Stephanie Gillespie
Omaha Hematology Supervisor

HEPATITIS B SEROLOGY AND VACCINATION

Hepatitis B serology offers a wide variety of tests to assess infection, chronicity or immune status. The serologic markers typically used to differentiate between acute, resolving, and chronic infection are HBsAg, anti-HBc, and anti-HBs.

Hepatitis B Surface Antigen (HBsAg) Test #565
This serologic marker on the surface of HBV can be detected in high levels in serum during acute or chronic hepatitis. A positive HBsAg indicates that the person is infectious.

Hepatitis B Core Total Antibody (anti-HBc) Test #567
This marker appears at the onset of symptoms in acute hepatitis B and persists for life. The presence of anti-HBc indicates either an ongoing or past infection with hepatitis B virus (HBV) in an undefined time frame.

Hepatitis B Surface Antibody (anti-HBs) Test #568
The presence of anti-HBs is generally interpreted as indicating recovery and immunity from HBV infection or in a person who has been successfully vaccinated against Hepatitis B.

Vaccination
Vaccination produces a protective antibody response in >90% of adults after the third dose. After age 40, the protective antibody response after vaccination declines below 90%. Age, smoking, obesity, genetic factors, and immune suppression contribute to decreased vaccine response. The CDC does not mandate serologic testing for immunity after routine vaccination of adults. Post-vaccination testing is recommended for persons whose subsequent clinical management depends on knowledge of their immune status, and this would include certain health-care workers.

Anti-HBs Titers
Among young adults who respond to a primary vaccine series with antibody concentrations of >10 mIU/mL, 17%-50% have low or undetectable concentrations of anti-HBs 10-15 years after vaccination. Even when anti-HBs concentrations decline to <10 mIU/mL, nearly all vaccinated persons remain protected against HBV infection for at least 20 years even if vaccines lack detectable anti-HBs at the time of an exposure.

For this reason, immunocompetent persons who have had post vaccination testing and are known responders to hepatitis B vaccination with anti-HBs concentrations of >10 mIU/mL do not require additional passive or active immunization after an HBV exposure and do not need further periodic testing to assess anti-HBs concentrations.

If post-vaccination testing was never performed following exposure, persons should receive both hepatitis B immune globulin (HBIG) and hepatitis B vaccine as soon as possible (<24 hrs.) after exposure.

Questions: Gregory Post, Ph.D.
Director of Clinical Services

WHEN IS A "THROAT CULTURE" WARRANTED INSTEAD OF A "BETA STREP SCREEN"?

Due to a higher number of throat cultures being ordered, it is important to remember that the primary cause of bacterial pharyngitis is **Group A beta hemolytic streptococcus. This is the only organism that warrants antimicrobial drug therapy**. Current guidelines recommend culturing **only beta hemolytic streptococcus** from throat specimens. Beta hemolytic strep can result in serious secondary infection, so rapid testing is important.

Test #688 Beta Strep Culture, Throat provides better turnaround time and is cost effective for the patient. The Beta Strep Culture is reported within 18-24 hrs.

Test #601 Culture, Throat should only be ordered when a clinical situation warrants special considerations (such as a bacterial pathogen carrier state or the presence of yeast). When the physician requests this test, t**he organism or the condition must be listed on the requisition**. Test #601 Culture, Throat is reported within 48 hr - 72hrs.

Questions: Contact Shari Talbert
Microbiology Supervisor

THANK YOU

Physicians Laboratory Services, Inc. thanks you for choosing PLS as your reference laboratory. We value you as a client and will continue to strive to provide the most accurate and precise testing in a timely and cost efficient manner.

A special thank you is extended to you for completing our 2007 Client Survey. From this information, we can constructively strive to meet your needs, improve our service, and provide a more efficient and productive laboratory. We value your comments and suggestions.

Please take a few moments to view our website www.physlab.com. The Website is updated continuously, and the most current information regarding specimen requirements, test name, and number, etc. will be found under the headings "Services" or "Clients" and select TEST DIRECTORY.

We look forward to new and exciting developments for our laboratory in 2008. All of the pathologists and employees at Physicians Laboratory Services, Inc. wish you and your family a very Happy Holiday Season!!