UC HEALTH LABORATORY

Lab Update

UC Health

LABORATORY PHONE 585-LABS

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LabUpdate is a periodic publication of the Clinical Laboratory of UC Health. By way of this publication, lab users are provided: 1) updated operational information relevant to the practice of laboratory medicine within UC Health facilities, and 2) didactic material generally applicable to laboratory medicine.

Chemistry

Cessation of Routine fT3 Testing

As of December 1, 2016, UC Health Lab will be removing free triiodothyronine (fT3) from its test menu. This decision was made in consultation with the department of endocrinology. The methodology employed for this test was a competitive binding immunoenzymatic assay. fT3 as an analyte is challenging to measure, as its concentration is typically the lowest of all the thyroid function tests. Recent studies have demonstrated it has the poorest correlation with mass spectrometry-based reference methods relative to other thyroid function tests [1]. The majority of indications for fT3 testing may also be evaluated using TT3 (LAB136) testing.

Please consult Dr. Chris Crutchfield, PhD at 584-4071 or chris.crutchfield@uc.edu for assistance in evaluating patients with altered binding proteins suspected of T_3 thyrotoxicosis.

[1]. Jonklaas, J., Sathasivam, A., Wang, H., Gu, J., Burman, K. D., & Soldin, S. J. (2014). Total and free thyroxine and triiodothyronine: measurement discrepancies, particularly in inpatients. *Clinical Biochemistry*, *47*(13–14), 1272–1278. https://doi.org/10.1016/j.clinbiochem.2014.06.007

Specimen Collection

Venous Blood Gas Collection

Venous blood gas specimens collected or transported in a vacutainer tube are not recommended for analysis due to O2 contamination. Therefore, effective May 1, 2014, the laboratory no longer drew or accepted Venous Blood Gas specimens collected in a vacutainer tube. Venous Blood Gas analysis will STILL be available via collection and transport in a syringe either from a line draw or peripheral stick. (LAB4912)

However, please note that based on the collection technique, these orders will be Unit Collects as neither the Laboratory nor Respiratory Therapy staff is authorized to collect these specimens. The laboratory is only certified to collect peripherally using a butterfly syringe or vacutainer method, both of which introduce O2 into the sample. Therefore, the laboratory can NOT collect VBG's. Venous pH, via a vacutainer tube (LAB75), will still be an acceptable code. Do not collect a VBG and transfer into a vacutainer tube as this will be cause for specimen rejection.

Venous Blood Gas: Syringe/Line Draw: LAB 4912

Microbiology

Transisition of Blood Culture Bottles

Beginning December 1, 2016, the laboratory will be transitioning to a new blood culture bottle type. The new bottles (FA Plus Aerobic Bottle Resin [Lawson #501398] and FN Plus Anaerobic Bottle Resin [Lawson #501399]) will be replacing the current ones, which are being discontinued by the manufacturer. Unlike the current bottles, which contain charcoal, the new bottles contain resin beads and their liquid therefore appears lighter in color. They perform as well as, if not better than, the current charcoal-containing bottles. Similar to charcoal, the resin beads absorb antibiotics in the blood, thus limiting the inhibitory effect on microbial growth if treatment is initiated prior to obtaining cultures.

Collection of blood for culture prior to initiation of antibiotic therapy, however, is still recommended with the new bottles. During the transition period, charcoal-containing bottles will still be accepted by the laboratory. If you have any questions regarding this transition, please contact the Microbiology department at 584-3913.

FA Plus
Aerobic

FN Plus
Anaerobic

Coagulation

PTT Reference Range Changes

On November 17th 2016, UC Health laboratory system to include University, West Chester, and Daniel Drake Hospitals will be switching to a new lot of aPTT reagent for coagulation testing. With the new lot there will be a change in the reference range from 24.3-33.1 to **25.5-35.0 seconds for aPTT.** The HPTT or heparin therapeutic range will remain the same at 90-130 seconds for the standard dose heparin protocol. There will be a notation on the patient report when this reagent change has been completed. Any questions call Cate Cronin, Technical Specialist laboratory at 584-5027 or Angela Heinz, UCMC Laboratory Manager at 584-1617.

Toxicology

Removal of MDMA (Ecstasy) from Drug Screen Panels

On December 1, 2016, MDMA (Ecstasy) will be removed from the EDS (LAB3379) and OBEDSR (LAB1933) drug screen panels. This decision was made in consultation with the ED and the OB/GYN department. As many are aware, the chemical landscape of illicit drug abuse is growing and there are now many other drugs other than MDMA that fill its recreational niche. The reality is that our patient population does not generally fit the demographic for MDMA consumption. These issues combined have negative consequences on the positive predictive value of the MDMA screening test. Urine MDMA screening with remain available as a standalone test, "MDMA, Screen Only, Urine" (LAB407). Definitive testing for MDMA in urine will remain available on the comprehensive drug panel (LAB3324). Please consult Dr. Chris Crutchfield, PhD at 584-4071 or chris.crutchfield@uc.edu with any questions.