LifeLabs®

Health Care Providers' Newsletter

July 2017

LifeLabs Healthcare Providers' Conference

09:00—17:00, Saturday, October 14, 2017

Fairmont Waterfront Hotel

900 Canada Place Way, downtown Vancouver

LifeLabs invites physicians, nurses and other healthcare practitioners to an intensive one day conference to better interface clinical practice with Lab Medicine. Through case-based examples and literature reviews, local experts will cover the following topics:

- Phone a Friend: The Interface between Laboratory Medicine and Clinical Practice – cases from everyday practice.
- Choosing Wisely – Using diagnostic tests appropriately.
- Toxicology—Drug testing in substance use disorder patients.
- Haematology Potpourri – NOACs, coagulation monitoring and common cases.
- What's new in infectious diseases diagnosis—New viruses, STIs, and syndromic testing.
- The Diagnostic Management Team model – How it can help clinicians. Perspectives from Galveston, TX.
- Decision support and eOrdering – First, do no harm.
- The Genomics Revolution—Applications in the real world, such as non-invasive prenatal testing, cancer diagnosis, microbiology, pharmacogenomics and personalized medicine.
- What would you do? A panel discussion of diagnostic dilemmas.

Our goal is to bridge the gap between clinical and laboratory medicine. Often seen as a "black box," we aim to demystify the laboratory and to establish better access to laboratory medicine expertise. We will use case studies to provide practical clinical pearls for health care providers (particularly those providing primary care, such as GPs and NPs) and we will also explore how evolving laboratory medicine practice will improve the quality of clinical care for all our patients.

To learn more or register, please visit our website or contact the event coordinator at annualconference@lifelabs.com.

Anaerobic Transport Swabs

Romina Reyes, MD, FRCPC, Medical Microbiologist

Effective July 3, 2017, LifeLabs will be offering a specialized collection swab with transport media that facilitates the recovery of anaerobic bacteria.

Important: routine bacterial cultures should continue to be collected on the Culturette Liquid Amies swabs provided by LifeLabs.

Notification of Known Critical Results

Clinton Ho, MD, FRCPC, Hematopathologist

At Lifelabs, critical results are treated with the utmost importance as they may represent an urgent life-threatening condition. Once a critical result is reported, the ordering doctor or Healthcare Provider is immediately contacted at all hours with the results in order to facilitate appropriate patient care and comply with our laboratory accreditation criteria. In the case of patients with known recurrent critical results, Lifelabs will try to contact the ordering doctor/HCP the next morning instead.

For patients with an after-hours critical neutropenia and a previous critical neutropenia in the past 90 days that has been documented as having been notified to the ordering doctor/HCP, the current critical neutropenia will be notified to the ordering doctor/HCP the next morning if their medical office is closed.

A similar procedure is followed for patients with:

- critical anemia where the haemoglobin is no more than 5 g/L lower than the previous.
- critical thrombocytopenia where the platelet count is 15*10E9/L or greater.

Fecal Calprotectin

Kent Dooley, PhD, FCACB, Clinical Biochemist

Fecal Calprotectin, an effective test for differentiating of Inflammatory Bowel Disease (IBD) from Irritable Bowel Syndrome (IBS), is now available as an in-house test at LifeLabs. The test is a viable alternative to colonoscopy for patients demonstrating the symptoms of IBD. It is also effective in monitoring patients for relapse of IBD.

Calprotectin is a protein which is present in abundance in the cytosol of neutrophils. Its presence in stool reflects inflammatory activity in the intestinal mucosa. Increased fecal calprotectin can be seen in inflammatory bowel diseases, coeliac disease, infectious colitis, necrotizing enterocolitis, intestinal cystic fibrosis and colorectal cancer.

Calprotectin testing is performed on a random stool collection. Results are quantitative with a cut-off for IBD of 50 µg/g. Due to lack of standardization of methods the cut-off for relapse is method dependent: the proposed optimal cut-off for relapse of IBD for the Diasorin assay used by LifeLabs is 125 µg/g (*Clin. Biochem*. **2016**, 49 (1), 268–273). With the new method, results up to 500 ug/g are comparable to the previous (referred out) method, while previous values greater than 1000 ug/g can now be up to 3 times higher. It should be noted that intake of non-steroidal anti-inflammatory drugs (NSAIDS) increases Fecal Calprotectin, possibly leading to false positive results.

The normal levels of Fecal Calprotectin in young children and infants can be substantially higher than for older children and adults. Though not thoroughly evaluated in this age group, the test is likely to be clinically less sensitive for infants and young children. For infants 3 - 6 months of age, normal values can be up to 10 times higher than the adult cut-off and for children 6 months to 3 years of age normal values can be up to 4 times the adult cut-off. (*Scand. J. Clin. Lab. Invest.* **2014**, 74, 254–258).

This test is not currently covered by the BC Medical Services Plan (MSP) Ontario Health Insurance Plan (OHIP) but may be covered by a patient's extended health insurance plan. Please contact LifeLabs Contract Services at 604-507-5234 to find out about the current fee for the test.

Fecal Calprotectin testing was previously referred out to another reference laboratory: with the availability of this test in-house, we anticipate a substantial reduction in turn-around time to 4 -7 days.

Thyroid Testing in Pediatric Patients

Cheryl Tomalty, PhD, FCACB, Clinical Biochemist

As of July 31, 2017, LifeLabs will apply the current BC Guidelines on Thyroid Function Tests to pediatric patients <18 y of age. This means that all patients, regardless of age, will now be subject to the current algorithm for TSH, FT4, and FT3 testing. This will align LifeLabs with the practice in other BC laboratories.

For more details, please visit the BC Guidelines at: http://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/thyroid-testing

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