LifeLabs® INSIDE Diagnostics ONTARIO

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THE DIAGNOSTIC NEWSLETTER
FOR **HEALTHCARE PROVIDERS**

ONTARIO MEDICAL DIRECTOR UPDATE

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PROCESSING MULTIPLE OVERLAPING REQUISITIONS FOR A PATIENT ON THE SAME DAY

The Covid-19 Pandemic has presented us with a number of new challenges and opportunities in terms of providing service both to our patients and our Health Care Practitioners (HCPs). To better support virtual care, we have increasingly made use of fax ordering and have developed a method for e-ordering of laboratory tests, which we are looking to expand and improve.

This shift to a more virtual care and in the context of continued pandemic, has resulted in some challenges when patients present at our Patient Service Centers (PSC) with multiple requisitions (three or more) that have overlapping test orders from different physicians. This is likely a consequence of patients trying to minimize number of visits to PSCs due to perceived COVID-19 risks, but it creates significant difficulty for our staff, as the MOHLTC does not allow multiples of the same test to be ordered for a patient per day.

When the patient arrives with two requisitions, we attempt to consolidate the two into one if the orders are very similar, and make one physician a "copy to" physician. If the orders are very different, then we would have to process them as two separate requisitions. One downside of consolidating requisitions is that a HCP may get a result for a test that they did not order. If this were a critical result, then both HCPs could be contacted to respond to the critical result, although this is likely to be a very rare occurrence.

The problem becomes more difficult to address when the patient presents with three or more requisitions. In that case, we will attempt to apply the same approach as above for two requisitions. However, if there is significant overlap with the third, then the patient may be requested to return the next day to have tests on the third requisition collected and processed. We realize that this is not an ideal solution, and we apologize in advance for any inconvenience, but we do have to adhere to the Ministry's directives.

CONSIDERATIONS FOR RECEIPT OF TEST RESULTS BY A SINGLE METHOD

Over the next few months, we will also be contacting HCPs who receive test results from LifeLabs by more than one method. Many of you, receive results through Electronic Medical Record (EMR), but also receive paper copies of the same reports. In the coming months, we will be connecting with you to discuss switching to a single method of receiving lab test results.

Thank you for continuing to collaborate with LIfeLabs in ensuring highest quality of care during these challenging times.

If you have any questions, please contact our Customer Care Centre at 1-877-849-3637. We will respond to your questions within one working day.

ANAL CANCER SCREENING OFFERED AT LIFELABS ONTARIO – PART 2
ANAL CYTOLOGY REPORTING AND FOLLOW UP GUIDELINES

In December 2020. issue of the Newsletter we published an article (Part 1) which was focused on the utility of anal cytology in screening for patients at higher risk for anal squamous intraepithelial lesions (ASIL), including details about test ordering and sample collection. This article (Part 2) will continue on the same topic with a focus on reporting and follow up guidelines.

DETAILS OF ANAL CYTOLOGY REPORT:

Anal cytology reports will generally follow the format for cervical cytology.

The absence of columnar cells in the smear does not reflect the validity of the sample. The sensitivity, specificity, and predictive value do not hinge on the presence or absence of columnar cells. Some sources, however, recommend that both squamous and columnar cells should be present in samples for adequate interpretation of slides.

a) Negative for Intraepithelial lesion or Malignancy

No abnormal cells or signs of HPV-related changes.

b) ASCUS-Atypical Squamous Cells of Undetermined Significance

This essentially means that some cells that were seen were mildly abnormal. ASCUS results can be caused by a variety of factors including inflammation or infection, and are not necessarily an indicator of precancerous changes.

c) LSIL-Low Grade Squamous Intraepithelial Lesion

This refers to mild dysplasia. This type of lesion rarely becomes cancerous. Some warts are identified as LSIL on biopsy.

d) HSIL-High Grade Squamous Intraepithelial Lesion

This is moderate or severe dysplasia. These lesions can transform into cancer over time.

FOLLOW UP BASED ON CYTOLOGY RESULTS:

Following the completion of Digital Anal Rectal Examination (DARE) and the cytology results, the health care provider will formulate a plan for treatment, further evaluation with high-resolution anoscopy (HRA), or for continued follow-up.

High-resolution anoscopy (HRA) is a procedure during which an anoscope is inserted and a colposcope is used to examine systematically the squamocolumnar junction, the transformation zone and the perianal skin. Any suspicious lesion seen should be carefully evaluated and biopsied. Without HRA only a small percentage of suspicious lesions are identified. High-grade lesions that are detected can be ablated under HRA.

This is a challenging exam to perform, with a long learning curve and requiring specialized equipment. The number of clinicians trained to perform HRA is limited. Ideally, these patients should be followed by a multidisciplinary team within in a reference centre.

ANAL SCREENING FOLLOW UP GUIDELINES

1. A normal DARE, negative anal cytology, and no lesions seen on HRA represent a completely normal exam. Patients should continue screening based on their immune status and their anticipated risk of exposure to HPV. For HIV-negative men having sex with men (MSM) and no prior history of anal lesions, anal cytology screening every 2 to 3 years should be adequate. HIV-positive persons should be seen annually.

ANAL CANCER SCREENING OFFERED AT LIFELABS ONTARIO – PART 2 (CON'T)

2. Patients with ASCUS on anal cytology and a normal DARE with no significant lesions noted on HRA who are HIV-negative could be seen once a year. HIV-positive patients could be seen every 6 months.

3. Patients with LSIL on anal cytology, normal DARE and no evidence of HSIL during HRA could be followed every 6 months. Patients with LSIL are at increased risk to progress to HSIL and should continue to be followed regularly.

4. Patients with LSIL on anal cytology who have large intra-anal warts or who are symptomatic from their warts should be offered treatment. Following treatment, patients should continue to be followed at intervals determined by their response to treatment and depending on their immune status.

5. Patients with HSIL on anal cytology, a normal DARE and no lesions found on HRA should be followed more frequently, which could be at 4 month intervals. In this case the HSIL cannot be treated unless it can be located on HRA. It seems reasonable to follow these patients in a similar fashion to patients with untreated HSIL.

6. Patients with HSIL identified in biopsies should be treated if at all possible regardless of immune status.

7. Only a small number of people with HSIL will go on to progress to invasive anal cancer, but at the present time we have no certain way of identifying who will and who will not progress.

8. Patients with HSIL who cannot be treated should be followed closely and regularly The recommended screening for this group is every 4 months at a minimum.

9. Patients with exams that are suspicious for invasive anal cancer and who cannot be biopsied in clinic or in whom the exam is not adequate should be referred to an experienced surgeon for an examination under anesthesia.

10. Patients diagnosed with invasive anal cancers should be referred to providers experienced in managing this type of cancer.

POINTS TO REMEMBER

- Incidence of Anal Squamous Intraepithelial Lesion (ASIL) is high in certain populations, including HIV positive and HIV negative individuals with history of receptive anal intercourse, and in immunosuppressed and immunocompromised individuals.
- Anal Pap is a screening tool used to identify ASIL
- LifeLabs provides anal cytology and HPV DNA tests which can be done on the same sample

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UPDATES TO C- REACTIVE PROTEIN (CRP) TESTING METHODOLOGY

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Effective April 4th 2021 LifeLabs is introducing a new methodology for C- Reactive Protein (CRP) testing.

The new method shows improved accuracy and precision across the CRP clinical range, including low concentrations used in cardiovascular disease assessment and high concentrations important for assessment of acute inflammation.

EXPECTED CHANGES:

- The two tests currently offered (high sensitivity i.e. CRP-hs and wide-range i.e. CRP-wr) will be replaced by a single CRP test, with utility in both cardiac and inflammation assessments. Clients will be able to order this test by indicating "CRP" on the OHIP requisition.
- There will be a minor change in the clinical reportable range from 0.3-300.0 mg/L to 0.6-350.0 mg/L.
- A new interpretive comment will be provided with all CRP test results to align with the current guidelines:
  "Test method: Roche Cobas CRP, suitable for cardiovascular disease assessment and detection of active inflammation.
  CRP ≥ 2.0 mg/L is a risk-enhancing factor for cardiovascular disease, as defined in the Guidelines of the American Heart Association and the American College of Cardiology (JACC 2019; 74: e177)."

There are no changes in:

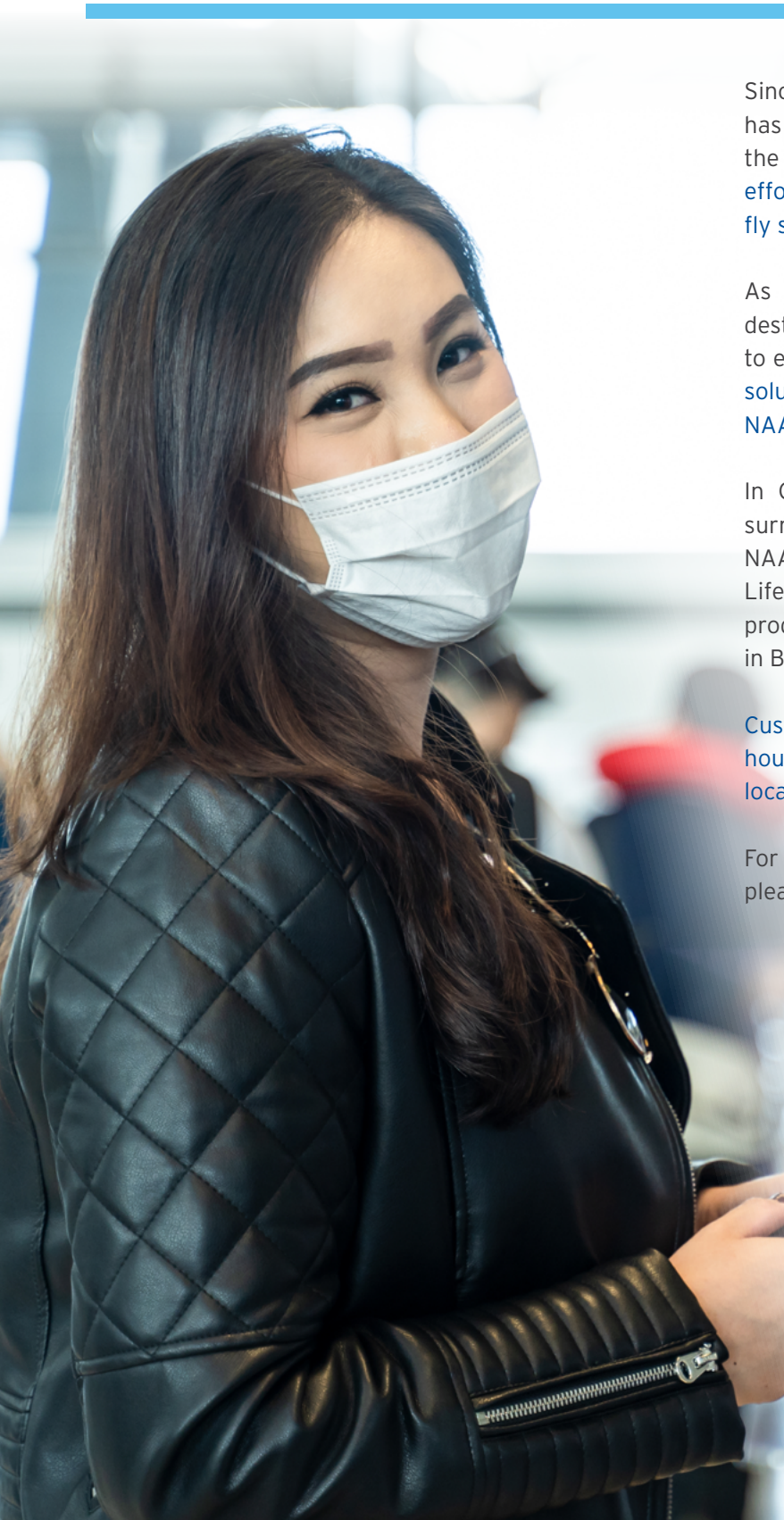
- Specimen collection requirements.
- Reference cutoff and result flagging
- The interpretive comment for CRP test results ≥ 5.0 mg/L:
  "CRP ≥ 5.0 mg/L may be due to acute inflammation."

For further information, please contact one of the LifeLabs clinical biochemists below, or LifeLabs Customer Care Centre at 1-877-849-3637.

We welcome your feedback!

LifeLabs®

LIFELABS LAUNCHES FLYCLEAR™ FOR CUSTOMERS WITH ESSENTIAL TRAVEL NEEDS



Since the beginning of the pandemic, the LifeLabs team has been exploring different opportunities to help restart the economy. Late last year, LifeLabs launched its latest effort to support Canadians with essential travel needs, to fly safely.

As testing requirements worldwide evolve, many travel destinations require proof of a negative COVID-19 test result to enter their country. FlyClear™ by LifeLabs is a turn-key solution that offers travelers access to both COVID-19 PCR/NAAT swab and COVID-19 Antibody (serology) testing.

In Ontario, travelers in the Greater Toronto Area (and surrounding areas) and Ottawa that require a COVID-19 PCR/NAAT or Antibody test for their flight clearance can use the LifeLabs FlyClear™ program to complete their testing. This program recently expanded to the Greater Vancouver area in British Columbia, with additional markets coming soon.

Customers can expect to receive their results within 48 hours of their appointment at a participating FlyClear™ location, including select Shoppers Drug Marts.

For more information about LifeLabs' FlyClear™ program, please visit www.LifeLabs.com/FlyClear.

FlyClear™ BY LifeLabs®

DECISION FATIGUE: SHORTCUTS AND SHUT DOWN

When we fuel our cars, even our bodies, we all know they will run optimally until the fuel runs out. Same can be said for the funds used for online shopping that become limited over time. How often do you consider that your brain requires the same kind of re-fueling to restore its cognitive abilities?

We make about 35000 decisions per day and our brains have limited capacity to make logical choices within that timeframe. The number of decisions made is directly proportional to poorer decisions and this effect is called **decision fatigue.** In this state, not only is the ability to make an educated, rational choice impaired, but our self-regulation is also altered. Under this type of stress, we minimize strain and effort by creating shortcuts or we shut down.

Stress and exhaustion wreak havoc on self-regulation. Add decision making and time limitations to this arduous cocktail, and the result is a perfect recipe for making choices based on impulse or feeling rather than analysis and accuracy. Anyone knows that living without access to a washing machine is brutal. In the event of needing a replacement, the lowest sale price will win over calculating the cost savings associated with energy ratings. While it is the right choice to satisfy the pressing need now, it's not optimal. This compensation is a psychological effect called **bounded rationality.** We bypass critical thinking to achieve quick, adequate conclusions while working exclusively within the boundaries of limited information, emotional triggers and biases. While the washing machine example has trivial consequences, on a systemic level, some people during COVID-19 pandemic have based their decisions not to wear masks or stay at home because no one they knew was sick, or they were influenced by misinformation on social media where abiding by public health regulations was presented as an affront to personal freedom.

When we are faced with too much information or too many choices, our brain wants to exert the least amount of effort. Beyond procrastination, shut down can manifest in another way. A menu with too many choices is overwhelming, so we default to pizza, an easy, no-fail option. Netflix even knows how hard it is to decide what to watch, so they now offer a one-click option to watch what the algorithm has chosen. **Status quo bias** is a compensation our exhausted brains make by going with current state, defaults, or what is familiar. If we remain exhausted, status quo bias amps up to make us become resistant to change, and our shut down response can manifest as anxiety or isolation. When we consider the past year during this pandemic, the existing stress of our daily routines has been compounded by overwork or job insecurity, information overload, and hyper-vigilance about our safety. Therefore, it is no surprise that once mundane decisions have become impossible for some of us.

DECISION FATIGUE:
SHORTCUTS AND SHUT DOWN (CON'T)

There are ways we can beat this and make more consistent, quality decisions.

1. **Teamwork -** Share the work, talk it out to hear different opinions and surround yourself with diverse friends and teams to keep biases in check.
2. **Plan –** Make important decisions in the morning when the cognitive tank is full, then strategize the remainder of your day for when brain capacity will wane.
3. **Limit & simplify -** Choose a minimalist approach to your daily routines to save brain power; same breakfast every day, develop a clothing 'uniform' (think Steve Jobs – black turtle neck & jeans)
4. **Reframe -** Choose to see your typical default options as losses as it can allow you to commit to your choices fully and limit regret.
5. **Self-care –** Acknowledge the pain of decision making demands by limiting your pity party time, use expansive breathing to oxygenate the brain, take a walk for perspective, meditate to keep your self-regulation in check, journal for goals and gratitude and enlist a low information diet.

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For more information, please visit our site at **www.LifeLabs.com**

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