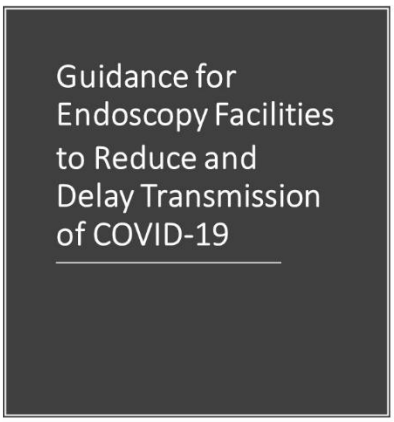

Canadian Association of General Surgeons

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Questions from live webinar

Answers provided by Dr. Frances Tse (FT), Dr. Kevin Waschke (KW) and Dr. Grigorios Leontiadis (GL)

What does the literature say: are there reports of physicians having contracted any other diseases during endoscopy in the pre-COVID era?

FT: Yes, there have been case reports (e.g. https://www.giejournal.org/article/S0016-5107(04)01858-9/pdf). But no one has systematically assessed this risk in endoscopy personnel.

Should we assume that rural areas (outside Toronto) have not reach the pick?

FT: Hospital / ICU admissions are very crude surrogate measures of true prevalence in a community. These outcomes tend to lag behind the onset of infections. By the time we see a spike, we are behind the eight ball. But until we have true prevalence data, we can cautiously assume if you're not seeing a spike in hospital admissions in rural areas, then the prevalence is low.

How will changes to endoscopy impact trainees' endoscopy competencies?

FT: We all share concerns about training. In the beginning of the pandemic, we've excluded all trainees from our lists to reduce their ris of exposure and to conserve PPE. We're now slowly incorporating them into our lists as our PPE supply is more stable, the surge has not occured, and we have a conservation and risk minimizing strategy with pre-procedure testing.

I have a question in regards to gastroscopies. There is some confusion about whether these are aerosolizing procedures vs not aerosolizing. Also PPE that should be used in these cases.

FT: EGD is considered AGMP by all major GI societies. IPAC in many provinces disagreed. It does not appear they have assessed the new emerging evidence. In the post-peak phase, if you are doing EGD on a low risk patient in a low prevalence area, you may consider using surgical masks with face shield, gowns, and gloves. But if you're in a high prevalence area, then you've to assume everyone is potentially infected and do EGD with N95 masks. If pre-op testing is available, then you can conserve PPE by using surgical masks if test negative and low pre-test probabiliy of having COVID.

...our regional hospital is planning to initiate re-opening procedures (including Day Surgery endoscopy) and your highlighted slides with references and statistics would be valuable, in this regard.

How might these recommendations apply to the Out of Hospital Clinic environment?

FT: with regard to out of hospital facility, the slide on PPE Decision tree is taken from the perspective of ambulatory surgical center in the US. So this is applicable. And all infectious control measures that Dr. Waschke talked about also apply - hand hygiene, proper use of PPE, physical distancing in pre-op and post-op areas, etc.

Are there any centers using this pandemic as a research opportunity, doing research to determine whether endoscopy is indeed an AGMP

FT: Yes, CAG has received a few proposals to assess this.

What priority category does a pediatric symptomatic rule out celiac disease go?

FT: I would think it should be a Priority 2 (symptomatic and the test will change management and outcome)

My position is Single Endoscopist. What is your advice? Do only emergency Endoscopic Procedures?

FT: In the peak of a pandemic, the answer is yes. You need to make sure you minimize your exposure. Otherwise, your site will lose the only endoscopist during a pandemic. But in the post-peak phase, you may consider slowly ramping up activities depending on the local prevalence of COVID-19 following all the infectious control measures that we discussed. It is particularly important to select your patients carefully. If COVID positive or highly suspected, only do with full PPE if they are urgent.

For purely outpatient endoscopy facility, how can we test patients for COVID before endoscopy? I am not aware that it is available in Ontario for non hospital facility.

FT: This is not widely available yet even for most hospitals across the country. As far as I know, we are the only center in Ontario that is doing it routinely, and we're still trying to sort out the logistics. In the US, many centers are doing it. I would imaging Public Health may not have the capacity now to offer wide scale pre-op testing. So, if you're in a low prevalence area with no test ability and negative pre-screen, you may consider doing all procedures with surgical masks and faceshield. Screen your patients carefully. If you see a surge of cases locally then you will have to either scale back activities if not enough N95 or use N95 for all upper cases if you've enough supplies.

Cancer Care Ontario has issued some provincial guidelines re: only performing the extremely urgent cases (even colon cancer surgery is still on hold unless obstructing). Ontario is one of the hardest hit provinces, but it's very much concentrated in a few

FT: You're absolutely right. The province has not given an OK for us to ramp up activities. We're still operating at 10% doing Priority 1/2 cases even though we do not have a surge locally. We're told to keep bed capacity at 80-85% for the LTC situation. Many factors determine whether a center can ramp up - bed capacity (and whether you need to keep some for LTC and potential surge), PPE resources, personnel, medications, and prioritization of all procedures (cardiac surgery vs. cancer surgery vs. ortho surgery etc). More discussion will need to take place with your local hospital admin to understand if any of those factors are impacting your capacity to ramp up slowly.

We are out of hospital facility in Ontario, with recommendation of using full PPEs such as face mask, face shield, gown, hair net, N95 and such, the cost to operate is now increase much more than before, and less procedures for safety measures. Is there a

FT: not aware of provincial cost subsidy at present. But should lobby OMA and MOH. May consider extended use of PPEs as per CDC guidance. Wear 1 mask/shield/scrub hat for the entire day unless they are soiled. Clean the shield after each case with Caviwipes. You've to change gowns for each patient anyway - so no additional cost here due to COVID.

Are elastomer masks available in Canada?
Does anyone have access to N99 masks (or better) as used in some UK units?

Yes, I saw them in home depot in the beginning of the pandemic, but they were all sold out by mid-March.

We should focus little more on health workers and the way they work together. Transmission seems to be much more in a nosocomial way than from a patient in the community.

FT: I agree with you on this, but we don't know for sure as no studies have assessed this and it would be difficult to prove where the HCWs contracted the infx - community or at work.

Can you comment on false negative NP swab in asymptomatic? Wouldn't you be concerned a negative test give false reassurance?

FT: we do have concerns although my infectious control expert here says the sensitivity is > 95% with the NPS. If the pre-test probabiliy is low and the NPS is negative in a low prevalence area, I would be OK doing AGMP with surgical masks. If the patient turns out to be positive within 24 hrs after procedure and you did wear a surgical mask, all you need to do is monitor yourself for symptoms. No need to self-quarantine.

When we start ramping up endoscopy slowly but surely, would you recommend dividing upper GI procedures from lower GI into separate days?

FT: I would bundle all upper together onto 1 list as much as possible. This would help you conserve PPE (N95) as well.

Have you seen different techniques anesthesia uses now to decrease coughing, etc... during a gastroscopy?

FT: not aware of this, but will look into it further.

CCO mandates FIT +ve patients to have colonoscopy within 8 weeks. How do we explain this to patients/Referring Physoicians.

FT: At our center, we are still doing FIT because we've the capacity and prevalence is low. Patients however do not want to come because of the pandemic. There are recent studies suggesting it is safe to delay FIT c-scope by 6 -9 months.

No test currently on the market have been approved or cleared by the FDA or health Canada. All the tests have been released under an emergency use authorization by the FDA. None have undergone full validation by the makers.

FT: Correct. No tests have validated and the proper diagnostic accuracy study has not been done.

Is there any thoughts on creating a national database for participating centres regarding long term impacts of COVID on population GI health?

FT: this is an excellent idea.

What is the ministry./government's position on reopening out of hospital endoscopy clinics in ontario?

FT: will have to wait for provincial guidance on this.

Does a air cleaner units in the procedure room would it help to clean airborne droplets?

FT: hepa filter is a good alternative to negative pressure room. But no need to use them unless it is a confirmed or highly suspected case for AGMP.

There are differences in screening tests that require sensitivity and specificity parameters and diagnostic tests where you would be more interrested in the positive and negative predictive value

GL: This is correct. We should use a test with high specificity when we need to rule in the diagnosis of SARS-CoV-2 (SpPin: with a test with high Specificity a Positive result effectively rules IN the diagnosis), for example prior to providing a complex, expensive "COVID-19-specific" treatment with potential AEs. Most RT-PCRs on NPS that detect viral RNA that have been developed by reputable labs most likely have very high specificity. Conversely, we should use a test with high sensitivity when we need to rule out the diagnosis of SARS-Cov-2 (SnNout: with a test with high Sensitivity, a negative test effectively rules OUT the diagnosis), for example when we screen patients prior to endoscopy for active SARS-Cov-2 infection. Unfortunately, there are absolutely no data publicly available on properly conducted studies on the sensitivity of any COVID-19 test. The sensitivity of the RT-PCRs on NPS depends not only on how well the actual PCR (i.e. the last step) works, but also on the viral load on the nasopharynx, how the NPS was obtained and how the RNA was extracted (several steps), so it is expected that its sensitivity will be quite low sometimes – how low nobody know as of yet. We need to keep the pressure on Public Health, HC, FDA, industry to conduct and publish proper diagnostic test accuracy studies for COVID-19 tests.

In the 4 levels of priority - where does symptomatic rule out celiac go?

FT: I would say priority 2 (symptomatic and procedure will change management and potentially outcome)

Does your team shower after gastroscopy procedures?

FT: Not after every procedure. I shower immediately after I get home from the hospital, and put the hospital clothes in laundry immediately.

Alberta has specifically listed EGD as a non-AGMP explictily different from CAG Should these questions have a national standard through federal review, given we are going to live with COVID for years, and the risks high?

FT: correct. Ontario as well. IPAC Canada is well aware that all major GI societies in the world (not just CAG) consider EGD as AGMP. The problem is that they are very overwhelmed now and do not have time to comprehensively evaluate all new evidence. And with the shortage of PPE resources and every subspecialty putting out their wish lists of AGMP, they are pushing back on recognizing any non-traditional AGMP as AGMP. We will have to wait for the proper study to convince them that, and there are proposals to do so. Even if we prove that EGD is an AGMP, they said we have to prove that the aerosols have infectivity with clinical outcomes. With the exception of intubation, no other traditionallly considered AGMPs are subjected to this level of requirement to prove that they are AGMPs. Most (e.g. bronchoscopy) are considered AGMPs based on biological plausibility more than any high certainty evidence. Unfortunately Public Health has not engaged any experts in performing these procedures in their decision making.

K95 masks acceptable?

FT: KN95 masks are the Chinese Standards for N95 masks. The two masks are equivalent or nearly equivalent on the features that most people care about.

Answered during the webinar

When do you do the pre-procedure test, how many days prior?

24-48 hrs prior (same in US)

The guidelines seem to lump upper endoscopy and colonoscopy when the risk for each is quite different? Shouldn't there be a guideline for each?

CAG considers them differently - EGD is AGMP, but colonoscopy is not. But AGA and Joint GI Society consider both as AGMP based on different certainty/quality of evidence (moderate for EGD and low for colonoscopy)

When you use N95 for the whole day, do you leave them on all day or do you take them off and put them on when needed?

Change for each case

What is the threshold to become a “high risk” area for community spread?

Community spread implies that the virus is now circulating in the community and is infecting people with no history of travel or of contact with an infected person.
The key is for public health to be able to identify persons who have have come into contact with an infected person, and trace those contacts and test them for infection.

Is there a utility to do upper endoscopy standing behind a shield

Faceshield

If you are wearing the same N95 all day do you have to keep it on the whole time without taking it off?

generally you should be changing n95 between cases as well as all the PPE

In a region where there is 18 cases over a population of 40 000, it's difficult to use 3 N95 mask per EGD and even more in face of our anesthesist who do not use n95 for all patients they intubate!?

Seems like you are in a low prevalence area. So if negative sreening (no symptoms, risk factors etc) and no testing ability, then you may go with standard precautions (surgical masks) based on the recent Repici data. It would be more reassuring to know the true prevalence in your area by doing random testing of asymptomatic individuals in your community - but this is a public health decision.

What is the recommendation for use of PPE in patients who are asymptotic and Covid status is unknown for regular screening colonoscopies?

Standard precautions (surgical masks, gowns face shield etc) as colonoscopy is not AGMP.

AGMP also carries the need for air exchange post procedure and dwell time varies on unit. Some units require 30-60 mins dwell time. Can you comment this as IPC definitely adhers to dwell time/air exchange with all AGMP.

The dwell time can vary depending on the infection control assessment. It is recommended that infection control come to a quality control check for each room. The results can vary depending on multiple factors

What about colonoscopy procedures done on G/A intubated patients in the OR?- high risk due to intubation having occurred physically nearby?

The intubation is high risk AGMP. The endoscopist should not be present during the intubation. Once this is done, then you can enter using surgical masks. You can also check the air exchange of your room and follow CDC guidance on clearance time based on air exchange rates on their website (modern units with AE rate of 12-15, clearance time is about 20 min)

I am in an alledged "low prevalence" area ie. rural Nova Scotia and an asymptomatic untested patient with an emergency upper GI bleed requires prompt upper GI endoscopy

Then you can go with surgical masks if the patient passes pre-screening (no symptoms or risk factors etc).

Should all patients undergo PCR testing prior to endoscopy?

This is what most large US centers are doing now. In Hamilton, we test all upper procedures 24-48 hrs prior and if negative, we go with surgical masks. If positive, we defer unless it is truly urgent. This is our PPE conservation strategy.

We use a negative pressure room and we still have to delay every case for a terminal clean of the room. This seems excessive and unnecessary.

Use negative pressure room only for AGMP on COVID positive or highly suspected cases. No need to use it otherwise

So still no strong evidence! I am amazed at how quickly evidence based medicine goes out the window due to fear. We would never act on this lack of evidence. Why are we panicking? A face shield and regular mask should be enough.

Using parachute when jumping out of a plane to prevent injury also has low certainty evidence. But GRADE would issue a strong recommendation to use parachute based on low certainty of evidence because of potential catastrophic consequences. Same for CPR - there is low certainty of evidence, but strong recommendation can still be issued because of life threatening siutation. And EGD being AGMP and using N95 is based on low certainty evidence (not no evidence) - see Johnston study and biological plausibility.

Our IPAC refuses to allow N95 even in known COVID19 patients. This is despite me presenting them with most of the studies that Dr. Tse eloquenty presented here. How do you recommend that we better liase and reason with our ID colleagues to bring about mor

We've the same issue here at HHS negotiating with infectious control - but they recognize our position and let us use N95 with the pre-op testing strategy for conservation.

Are there centres in Canada that are using rapid testing or other testing to risk stratify patients?

Yes, in Hamilton Health Sciences. We test all upper procedures 24-48 hrs prior. If negative, we go with surgical masks. If positive, we defer if possible unless it is truly urgent

Given the shortage of propofol, should we stop using this to preserve propofol for major surgery/icu

Yes, need to liase with surgical services and AN to assess supply/demands.

So if your center has the availability to do COVID testing on all patients undergoing procedures, if the test is negative, you can do the scopes with just surgical mask/shield and no N95?

Yes. If negative and low pre-test probability for COVID, we go with surgical masks. If negative but high pre-test probability for COVID (symptoms etc), then the results may be false negative. We go with N95.

Would a faceshield/visor be superior to surgical mask in upper GI procedures if worn in addition to surgical mask?

You should always wear faceshield with surgical masks for all procedures. This is what all societies recommend for standard precautions