CCRC
OSLER COVID CLINICAL RESPONSE COMMITTEE

Elective and Emergency Operating Room Cases - CCRC Guidance **16 June 2020**

The COVID Clinical Response Committee (CCRC) has been asked to provide guidance on the approach to patients undergoing an operation or endoscopy during the COVID-19 pandemic.

General Guiding Principles [Applicable to all of the Categories below]

1. **Requirements for pre-operative COVID testing will be based on regional community transmission rates. Currently, the rate of community transmission in Osler's catchment area is high.**
2. **If the patient has COVID and the procedure is deferrable:**
    a. **The procedure should be postponed until the patient's COVID status is considered resolved. This must be at least 14 days since symptom onset AND 48 hours symptom-free.**
    b. **Virtual consultation with an infectious disease physician can be obtained to assist with interpretation of the test (e.g. some patients will have a positive swab for RNA but not be infectious, eg in cases of recently resolved COVID).**
3. **Intubation and extubation are considered aerosol-generating medical procedures (AGMP). Only staff required to intubate/extubate the patient should be present. Staff should follow the appropriate AGMP guidelines.**
4. **Immediately following intubation and extubation, a washout period is not required and the surgical team may enter the room immediately wearing standard operative precautions and eye protection except where specified below.**
5. **A HEPA filter is not required at intubation, during an operation, or at extubation except where specified.**
6. **Upon completion of a case, standard cleaning procedures should be followed for the Operating Room prior to initiating the next case. No additional washout time is required.**

Category 1

Urgency of Procedure	**COVID / Isolation Status**	**Type of Anesthetic**
Elective, Semi-Elective	From home. Self-isolation. Swab.	General

1. **This set of guidelines assumes the patient is coming from home on the day of surgery.**
2. **The patient should be appropriately screened using hospital screening protocol (by questionnaire). This includes an assessment of recent or current symptoms, potential exposure risks, and recent travel.**
3. **The patient should be instructed to self-isolate for 14 days prior to the booked procedure.**
4. **The patient should undergo a nasopharyngeal swab for COVID-19 48-72 hours prior to scheduled procedure at an assessment centre.**

Category 2		
Urgency of Procedure	**COVID / Isolation Status**	**Type of Anesthetic**
Emergency, non-deferrable	COVID-19 + or PUI	General

1. **This patient population is either known COVID+ or has risk factors or symptoms of COVID based on screening and should be treated as a PUI.**
2. **The patient should undergo a nasopharyngeal swab for COVID-19 unless this has already been done in the last 72 hours.**
3. **Surgery should not be delayed while the swab result is pending if this could lead to harm for the patient.**
4. **The supply of personal protective equipment (PPE) is currently adequate. The operative team will enter the room immediately following intubation wearing droplet / contact personal protective equipment.**
5. **Following extubation, the patient is recovered in the operating room and transferred directly to their own post-operative patient bed. This is the preferred process.**
6. **If a private room is available for recovery of the patient with appropriate monitoring and PPE, this is an acceptable alternative to recovery in the operative room if operationally required.**

Category 3		
Urgency of Procedure	**COVID / Isolation Status**	**Type of Anesthetic**
Emergency, non-deferrable	Not PUI. No suspicion for COVID.	General

1. **The patient should be appropriately screened using hospital screening protocol (by questionnaire). This includes an assessment of recent or current symptoms, potential exposure risks, and recent travel.**
2. **If any risk factors are present on screening, or if a patient is unable to be adequately screened the patient belongs in category 2.**
3. **If screening is negative, the patient does not require a COVID swab.**

Category 4 - Gastrointestinal Tract Endoscopy and OR procedures under regional anesthesia		
Urgency of Procedure	**COVID / Isolation Status**	**Type of Anesthetic**
All	Not relevant	Procedural Sedation/Regional

1. **Gastrointestinal tract endoscopy procedures and OR procedures under regional anesthesia are not AGMPs.**
2. **Unless it is felt that the patient will require intubation, these procedures should be performed using contact/droplet precautions alone.**
3. **A HEPA filter is not required during these procedures.**

Category 5 - Lower respiratory tract endoscopy (*Bronchoscopy*)		
Urgency of Procedure	**COVID / Isolation Status**	**Type of Anesthetic**
Elective, Semi-Elective	From home. Self-isolation. Swab.	Procedural sedation

1. **All respiratory tract endoscopies are considered AGMPs.**
2. **This set of guidelines assumes the patient is coming from home on the day of surgery.**
3. **The patient should be appropriately screened using hospital screening protocol (by questionnaire). This includes an assessment of recent or current symptoms, potential exposure risks, and recent travel.**
4. **The patient should be instructed to self-isolate for 14 days prior to the booked procedure.**
5. **The patient should undergo a nasopharyngeal swab for COVID-19 48-72 hours prior to the scheduled procedure at an assessment centre.**
6. **The procedure should be performed in an endoscopy Airborne Infection Isolation Room (AIIR) or a room with a closed door and a HEPA-filter following usual room turnover guidelines.**

Category 6 - Lower respiratory tract endoscopy *(Bronchoscopy*)		
Urgency of Procedure	**COVID / Isolation Status**	**Type of Anesthetic**
Emergent, non-deferrable	Not relevant	Procedural sedation

1. **All respiratory tract endoscopies are considered AGMPs.**
2. **The procedure should be performed in an endoscopy Airborne Infection Isolation Room (AIIR) or a room with a closed door and a HEPA-filter following usual room turnover guidelines.**

Category 7 - Upper Respiratory Tract Endoscopy (*Nasopharyngolaryngoscopy (NPL)*)		
Urgency of Procedure	**COVID / Isolation Status**	**Type of Anesthetic**
All	See discussion below.	None

1. **These requirements refer to NPL performed by otolaryngologists and head and neck surgeons.**
2. **The patient should be appropriately screened using hospital screening protocol (by questionnaire). This includes an assessment of recent or current symptoms, potential exposure risks, and recent travel.**
3. **If the patient is COVID positive or PUI, the procedure should be performed in an Airborne Infection Isolation Room (AIIR) or a room with a closed door. Airborne/contact/droplet PPE should be used.**
4. **If the patient screens negative for COVID, or has a negative COVID test, routine surgical precautions and eye protection apply.**

This decision will be revisited as needed or as provincial guidance is published.

Rationale

1. Ontario Health guidance on this topic is pending.
2. The COVID-19 virus is transmitted through large droplets produced by the patient. This requires droplet/contact isolation and personal protective equipment (PPE: surgical mask, eye protection, gloves and level 2 gown) for routine care.
3. There is a concern for possible aerosolization of COVID-19 during an AGMP and therefore airborne isolation and PPE (N95 mask, eye protection, gloves and level 4 gown) are recommended during, and immediately following, an AGMP.
4. Tuberculosis, measles and chickenpox are examples of infectious diseases transmitted by aerosolized particles produced by the patient. In these cases, airborne precautions, and AIIR or HEPA-filtration are required continuously for both routine care and during AGMPs.
5. During immediate routine care *or* during an AGMP, health care staff are protected by appropriate PPE, not by air flows or filtration of air within the room.
6. The OR is a positive pressure environment with a high rate of air exchanges.
7. Ontario Health testing guidance supports testing for all elective patients 24-48 h prior to the procedure and deferring all of those who are positive where it is safe to do so.
8. The submission of a preoperative surveillance swab in an asymptomatic patient does not make an individual a PUI.
9. The purpose of the preoperative swab in the elective or semi-elective procedure is to determine if the procedure should be delayed. Outcomes of patients who have active COVID-19 disease may have an increase in perioperative complications and possibly even mortality. Efforts to exclude the disease for this purpose assist in decisions regarding the timing of the operation.
10. Specifically with reference to NPL, expert opinion from professional societies is such that NPL is not an AGMP. In low-risk patients, routine precautions with eye protection is sufficient.

This is in alignment with the Ontario Health guidance for elective procedures and the Canadian Society of Otolaryngology - Head and Neck Surgery.