COVID-19 and Anesthesia for GI Endoscopy

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Disclosures

• I have no financial, industry or pharmaceutical relationships to disclose
• Information and recommendations regarding COVID-19 is dynamic and changes rapidly
Goals and Objectives

• Discuss changes to GI Endoscopy anesthesia practice related to COVID-19
• Reopening and ramping up cases
• Scheduling
• Preprocedure Assessment and Testing
• Logistics
• PPE
• Anesthetic management
UAB Endoscopy

UAB Hospital Advanced Endoscopy Unit
- Approximately 4000 cases/year
- Outpatient 70% Inpatient 30%
- 4 procedure rooms anesthesia staffed, 2 with fluoroscopy
- No negative pressure rooms

Kirklin Clinic Endoscopy Unit
- Moderate Sedation Only
- EGD, Colonoscopy, Paracentesis, liver biopsy

UAB Highlands Hospital Endoscopy Suite
- Moderate Sedation Only
- One Practitioner
Reopening and Ramping up Cases

• Unit closed from March 16- April 27
• GI CRNP’s kept list of highest priority cases
• Pts needing procedure within 14 days first priority
• Patients called and scheduled
• Began slowly last week
• Adding more cases this week
• Ramp up of cases depends upon local rate of infection, hospital resources available, possible increase in cases related to reopening of the economy
• One impediment is fear of coming to hospital due to fear of COVID-19
• Important to resume procedures to lessen morbidity associated with cancelled delayed procedures
Preprocedure Assessment

• Prior to COVID-19 patient’s had anesthesia preprocedure assessment done after arrival
• With the COVID-19 closure the urgent outpatient procedures had telephone preprocedure assessment done
• With reopening the unit we are continuing the telephone preprocedure assessment with physical exam done on arrival
• Part of the phone assessment is screening for any symptoms of COVID-19 including travel history as well as arranging for testing
COVID-19 Testing

• As of this time patients scheduled for a procedure go through COVID-19 testing
• Asymptomatic can shed the virus before onset of symptoms
• Currently patients are scheduled for testing at our facility within 72 hours of procedure and told to self isolate after test performed
• This process has led to some cancellations
• We draw from a large catchment area, open access unit, patients new to UAB, live far away
• Cannot afford to drive multiple hours and back home, or cannot afford hotel stay until procedure
• Working on local, reliable sources of testing
• Turnaround time still a problem in outlying areas
COVID-19 Testing

- We use a PCR test with a turnaround time of hours not days
- We also have Cephiad test with a turnaround time of about 45 minutes
- Limited numbers of Cephiad tests available
- Some are being reserved daily beginning today for Endoscopy patients
Positive COVID-19 Test

• If a patient is positive they are cancelled unless deemed urgent/emergent
• Positive COVID-19 patients are not done in the endoscopy suite
• Positive COVID-19 patients have procedures done in main OR in a negative pressure room
Patients arrive with a driver
Masks are worn on arrival for everyone
Temperature and screening for symptoms on arrival
Driver stays in waiting room
Waiting room has been arranged for social distancing
Employees are temperature screened each morning
Time between cases not extended
Usual disinfecting in procedure room
PPE

- Endoscopy cases are aerosolizing procedures
  - Viral particles are detectable in stool
  - Often positive stool tests after respiratory negative
- Currently our practice is to wear N-95, face shield, gown and gloves
- N-95 masks are reprocessed daily
- With negative testing and negative symptoms we feel pretty confident that patient does not have COVID-19
- However, test is not perfect, anesthesia provider, endoscopist and tech are in close proximity to oral opening so we feel use of PPE is appropriate
- Donning and Doffing of PPE should follow recommended practices
Anesthetic Management

- COVID-19 Positive patients have procedures performed in the main OR in a negative pressure room
- Full PPE
- RSI GETA
Anesthetic Management

- Cases in hospital Endoscopy suite are done with anesthesia as indicated for procedure
- Currently these patients are COVID-19 negative within 72 hours of procedure and negative screening on admission for elevated temperature and symptoms
- It is not felt that all patients should have GETA
- Avoid high flow nasal cannula if possible
- Avoid local anesthetic sprays to oropharynx
- Limit people in room during induction and extubation if GETA
- Recommendation to do follow up phone call at 7 and 14 days
We have begun using this mask for some upper endoscopy procedures.

Provides higher FiO₂ than nasal cannula.

Medium concentration mask will provide an average FiO₂ of 80% at suggested flow rate 8-10 lpm.

High concentration mask will provide an average FiO₂ of 90% at suggested flow rate of 10-12 lpm.

May act as a mechanical barrier when patients cough or retch during a procedure.