COVID-19 and Anesthesia for GI Endoscopy

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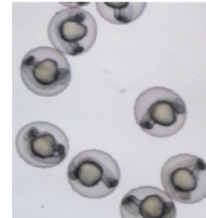
UAB MEDICINE



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

Logistics

- 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

Procedural Oxygen Mask (POM)

- We have begun using this mask for some upper endoscopy procedures
- Provides higher FiO_2 than nasal cannula
- Medium concentration mask will provide an average FiO_2 of 80% at suggested flow rate 8-10 lpm
- High concentration mask will provide an average FiO_2 of 90% at suggested flow rate of 10-12 lpm
- May act as a mechanical barrier when patients cough or retch during a procedure