COVID – 19 Updates: Restarting Surgery – Issues to Consider in Prioritizing Cases

Welcome to Tonight’s Webinar

Please submit questions in the control panel

Live Tweet with #ASMBSCOVID
CORONAVIRUS (COVID-19)
ASMBS Webinars: Available online

**April 14:**
“COVID-19 Updates from the ASMBS”

**April 21:**
“Embracing Telehealth”

**April 28:**
“Restarting Surgery: Issues to Consider”

**May 5:**

https://asmbs.org/resources/covid-19-updates-from-asmbs

https://asmbs.org/resources/covid-19-updates-embracing-telehealth

https://asmbs.org/resources/restarting-surgery-issues-to-consider

<table>
<thead>
<tr>
<th>Agenda</th>
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<tbody>
<tr>
<td>1. Welcome and Introductions.</td>
<td>Matt Hutter, MD</td>
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<tr>
<td>2. Just How “Elective” is Bariatric Surgery in the COVID-19 Pandemic?</td>
<td>Vivek Prachand, MD</td>
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<td>3. A Structured Approach for Safely Reintroducing Bariatric Surgery in a COVID-19 Environment: Cleveland Clinic Protocol</td>
<td>Ali Aminian, MD, Chris Daigle, MD</td>
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<td>4. COVID-19 Nonurgent Procedural Reboot</td>
<td>Tony Petrick, MD</td>
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<td>5. Panel Discussion. Q&amp;A.</td>
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</table>
Just How “Elective” is Bariatric Surgery in the COVID-19 Pandemic?

Vivek N. Prachand MD FACS ABOM
Professor of Surgery
Chief Quality Officer, Department of Surgery
“Elective” Surgery and COVID-19

• UCM COVID-19 planning began in January 2020, elective surgery halted March 16, 2020 to ensure capacity to handle potential surge (1000 procedures postponed)

• Need to balance response to COVID with providing ongoing care to non-COVID patients

• “Elective” ≠ “Optional”: Surgeon and Patient elect whether/when surgery is to take place based on medical necessity, effectiveness, and consequences of delay; the need for surgical treatment of disease remains

• Decision to proceed with any operative treatment in the setting of the COVID-19 Pandemic requires incorporation of novel factors previously not overtly considered by surgeons

  • Dynamic resource limitations (testing, PPE, ICU beds, ventilators, personnel)
  • Risk of infection to the health care team and patient
  • COVID-19 specific perioperative risk (asymptomatic COVID+ patients w/fulminant post-op respiratory failure)
MeNTS Scoring Process

We created a tool that systematically integrates these factors to facilitate decision-making and triage for non-emergent but *Medically-Necessary, Time-Sensitive (MeNTS)* Procedures

- 21 factors associated with poorer outcomes, increased COVID-19 risk to providers, and/or increased resource utilization were identified
  - Each factor is scored on scale of 1-5 (Total score 21-105)
  - Procedure, Disease, Patient
- Higher score is assigned for factors associated with poorer outcome, increased risk to providers, and/or increased hospital resource utilization during COVID-19 Pandemic
- Higher score indicates less harm to the patient if surgical treatment is delayed is pursued and/or non-operative treatment
Utility of MeNTS Scoring Process

- Procedure + Disease + Patient = Total MeNTS Procedure Score (21-105)
- Score thresholds can be adjusted in real time based on local resources and conditions in the context of the COVID-19 pandemic
  - If score exceeds Upper Score threshold, procedure not currently justifiable
  - Lower Score threshold guides preservation of resources for emergent/urgent cases

<table>
<thead>
<tr>
<th>MeNTS Score</th>
<th>OK to proceed</th>
<th>Reserved OR Capacity for Emergent/Urgent Cases</th>
<th>Procedure not justified</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>105</td>
<td></td>
<td></td>
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</tbody>
</table>

Worse outcomes
- Excessive risk to personnel
- Excessive resource utilization

Favorable surgical risk
- Favorable risk to personnel
- Favorable resource utilization

Prachand et al JACS 2020
Utility of MeNTS Scoring Process

• Procedure + Disease + Patient = Total MeNTS Procedure Score (25-105)

• Score thresholds can be adjusted in real time based on local resources and conditions in the context of the COVID-19 pandemic
  
  • If score exceeds Upper Score threshold, procedure not currently justifiable
  • Lower Score threshold guides preservation of resources for emergent/urgent cases

CDOR Cases
3/20-3/26 (N=35)
6 cases deferred
COVID-19 MeNTS Surgery Scoring System

Strengths

- Dynamic flexibility based on resources and conditions
- Transparency provides reassurance to our colleagues, trainees, and public that their safety and resource preservation is being taken into consideration
- Systematically integrates complex factors not usually considered (like a “checklist”)
- Offloads some emotional and ethical workload, reduces risk of moral injury
- Applicable across specialties and diseases
- Can be used along the entire COVID-curve, including the recovery phase as “elective” procedures resume

Weaknesses

- Paucity of collective high quality data in setting of ongoing pandemic
- Factors may require updating as data become available (obesity!)
- Disproportionate weighting of factors is inevitable
- False reassurance/objectivity (~"Pain score”)
- Does not anticipate resource availability for management of complications during hospitalization or readmission
New scoring system empowers surgery departments to prioritize medically necessary operations that should not be delayed because of concerns about hospital resources or risk associated with COVID-19.

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References:

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Joint Statement: Roadmap for Resuming Elective Surgery after COVID-19 Pandemic

American College of Surgeons
American Society of Anesthesiologists
Association of periOperative Registered Nurses
American Hospital Association
Obesity and COVID-19

**Respiratory dysfunction**
- Impaired respiratory mechanisms
- Increased airway resistance
- Impaired gas exchange
- Low lung volume
- Low muscle strength

**Comorbidities**
- Cardiovascular disease
- Diabetes mellitus
- Kidney disease

**Metabolic risk**
- Hypertension
- Prediabetes
- Insulin resistance
- Dyslipidaemia

Severe course of COVID-19
IFSO Statement: No Bariatric Surgery during Pandemic

In response to the COVID-19 pandemic outbreak, the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO) has issued these recommendations to our global healthcare providers aimed at keeping all our patients and practice staff in an as safe an environment as possible.

**General Recommendations**

All elective surgical and endoscopic cases for metabolic and bariatric surgery should be postponed during the pandemic. This minimises risks to both patient and healthcare team, as well as reducing the utilisation of unnecessary resources, such as beds, ventilators and personal protective equipment (PPE). In addition, postponing these services will minimise potential exposure of the COVID-19 virus to unsuspecting healthcare providers and patients [7].
Given the seriousness of the diseases that require metabolic and bariatric surgery, clinicians, hospital managers, and policy makers should ensure that these operations are not further delayed because of the widespread misconception that they are a last resort.

Eventually, the COVID-19 crisis will abate, and elective operations will resume, leaving an enormous backlog of patients who would benefit from bariatric and metabolic surgery. How should we prioritise whom to serve first with limited resources? At a broad level, the answer is simple. If patients are well enough to be safe surgical candidates, preference should be afforded to those with the greatest risk of morbidity and mortality from their disease, if it is probable that this risk can be reduced by surgery. This logic would apply, for instance, to many surgical candidates with poorly controlled type 2 diabetes or substantial metabolic, respiratory, or cardiovascular disease.
• Higher score for each factor is associated with poorer outcome, increased risk to providers, and/or increased resource use during COVID-19 Pandemic

• Total score range is 8-40

<table>
<thead>
<tr>
<th>Patient</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>&lt;20 yo</td>
<td>21-40yo</td>
<td>41-50yo</td>
<td>51-65yo</td>
<td>&gt;65yo</td>
</tr>
<tr>
<td>Lung Disease (asthma, COPD, CF)</td>
<td>None</td>
<td></td>
<td></td>
<td>Minimal (rare inhaler)</td>
<td>&gt; Minimal</td>
</tr>
<tr>
<td>OSA</td>
<td>Not present</td>
<td></td>
<td></td>
<td>Mild/Moderate (no CPAP)</td>
<td>On CPAP</td>
</tr>
<tr>
<td>CV Disease (HTN, CHF, CAD)</td>
<td>None</td>
<td>Minimal (no meds)</td>
<td>Mild (1 med)</td>
<td>Moderate (2 meds)</td>
<td>Severe (≥ 3 meds)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>None</td>
<td></td>
<td>Mild (no meds)</td>
<td>Moderate (PO meds only)</td>
<td>&gt; Moderate (insulin)</td>
</tr>
<tr>
<td>Immunocompromised*</td>
<td>No</td>
<td></td>
<td></td>
<td>Moderate</td>
<td>Severe</td>
</tr>
<tr>
<td>ILI Sx’s (fever, cough, sore throat, body aches, diarrhea)</td>
<td>None (Asymptomatic)</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
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<tr>
<td>Exposure to known COVID+ Pt (14d)</td>
<td>No</td>
<td>Probably Not</td>
<td>Possibly</td>
<td>Probably</td>
<td>Yes</td>
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</table>

Prachand et al JACS 2020
<table>
<thead>
<tr>
<th>Procedure</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>OR Time</td>
<td>&lt; 30 min</td>
<td>31-60 min</td>
<td>61-120 min</td>
<td>121-180 min</td>
<td>≥ 181 min</td>
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<tr>
<td>LOS Anticipated</td>
<td>Outpatient</td>
<td>23hrs</td>
<td>24-48 hrs</td>
<td>2- 3d</td>
<td>&gt; 4d</td>
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<tr>
<td>Post-Op ICU need</td>
<td>Very Unlikely</td>
<td>&lt; 5%</td>
<td>5-10%</td>
<td>11-25%</td>
<td>≥ 25%</td>
</tr>
<tr>
<td>Bleeding Risk/EBL</td>
<td>&lt; 100cc</td>
<td>101-250cc</td>
<td>251-500cc</td>
<td>501-750cc</td>
<td>≥ 750cc</td>
</tr>
<tr>
<td>Surgical Team Size</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>&gt; 4</td>
</tr>
<tr>
<td>Intubation Needed to</td>
<td>≤ 1%</td>
<td>1-5%</td>
<td>6-10%</td>
<td>11-25%</td>
<td>≥ 25%</td>
</tr>
<tr>
<td>Perform Procedure (Probability)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical Site</td>
<td>None of the following</td>
<td>Abdominopelvic MIS Surgery</td>
<td>Abdominopelvic Open Surgery, Infraumbilical</td>
<td>Abdominopelvic Open Surgery, Supraumbilical</td>
<td>OHNS/Upper GI/Thoracic</td>
</tr>
</tbody>
</table>

- Higher score for each factor is associated with poorer outcome, increased risk to providers, and/or increased hospital resource utilization during COVID-19 Pandemic
- Total score range is 7 – 35
<table>
<thead>
<tr>
<th>Disease</th>
<th>Non-Operative Treatment Option EFFECTIVENESS</th>
<th>Non-Operative Treatment Option RESOURCE USE/EXPOSURE RISK</th>
<th>Impact of 2wk delay in DISEASE outcome</th>
<th>Impact of 2wk delay in SURGICAL difficulty/risk</th>
<th>Impact of 6wk delay in DISEASE outcome</th>
<th>Impact of 6wk delay in SURGICAL difficulty/risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>None available</td>
<td>Significantly worse/not applicable</td>
<td>Significantly worse</td>
<td>Significantly worse</td>
<td>Significantly worse</td>
<td>Significantly worse</td>
</tr>
<tr>
<td>2</td>
<td>Available, &lt;40% effective as surgery</td>
<td>Somewhat worse</td>
<td>Worse</td>
<td>Worse</td>
<td>Slightly worse</td>
<td>Slightly worse</td>
</tr>
<tr>
<td>3</td>
<td>Available, 40-60% effective as surgery</td>
<td>Equivalent</td>
<td>Moderately worse</td>
<td>Slightly worse</td>
<td>Minimally worse</td>
<td>Slightly worse</td>
</tr>
<tr>
<td>4</td>
<td>Available, 60-95% effective as surgery</td>
<td>Somewhat better</td>
<td>Slightly worse</td>
<td>Minimally worse</td>
<td>Minimally worse</td>
<td>Minimally worse</td>
</tr>
<tr>
<td>5</td>
<td>Available, equally effective</td>
<td>Significantly Better</td>
<td>Minimally worse</td>
<td>Minimally worse</td>
<td>Minimally worse</td>
<td>Minimally worse</td>
</tr>
</tbody>
</table>

Higher score indicates less harm to the patient if non-operative treatment is pursued and/or surgical treatment is delayed.

- Limited resources are better deployed for diseases where non-operative care is less effective or not an option and where delayed surgical treatment leads to worse disease outcome and/or increases surgical risk.
- Total score range is 6 - 30.
Time Sensitivity and Predicting the Future

- MeNTS scoring assessment based on 2wk and 6wks postponement of care

- Pandemic will be with us at least 18 months
  - Likely that non-operative treatment will be less effective in pandemic (#quarantine15)
  - Patients who undergo Bariatric Surgery will be at lower risk of poor COVID-19 outcomes due to weight loss and comorbidity improvement

- 10 year cost per QALY favors Bariatric Surgery

- More patients die waiting to have Bariatric Surgery than after undergoing Bariatric Surgery (20 yrs)
Bariatric Surgery and COVID-19

• Obesity and several of its comorbidities (DM, HTN, OSA) increase risk of poor COVID-19 outcomes

• Safety of Bariatric Surgery is outstanding (safer than lap cholecystectomy)

• Hospital resource utilization with minimally-invasive Bariatric Surgery is modest

• Bariatric Surgery evaluation excludes patients for whom non-surgical therapies were effective
  • #quarantine15
  • We must remain vigilant for implicit bias against obesity
Bariatric Surgery and COVID-19: **NOT** Business As Usual at UCM

- Utilization of MeNTS scoring for prioritization
- Mandatory pre-operative testing
  - Nasopharyngeal swab 48-72 hrs before scheduled surgery
  - Same-day testing available (4hr TAT)
  - ? Role of antibody testing
- Visitor restrictions
- Universal masking, entry screening
- Establishment of separate COVID units for COVID-19 patients
- Intubation/extubation waiting periods
Center of the Surgical Treatment of Obesity

UCMBariatrics

@uchicagoweightloss

BariatricIntakeCoordinators
@uchospitals.edu

773.702.1618
THANK YOU
Questions?

?  

Please submit questions and they will be answered during the panel at the end....
A Structured Approach for Safely Reintroducing Bariatric Surgery in a COVID-19 Environment: Cleveland Clinic Protocol

Ali Aminian, MD
Director, Bariatric & Metabolic Institute
Associate Professor of Surgery
Cleveland Clinic

Christopher Daigle, MD
Director, Bariatric Surgery
Cleveland Clinic Akron General Hospital
Ohio/Kentucky ASMBS State Chapter
President

No Conflict of Interest
3 Important Questions to Ask

- When to Start
  - Local Factors

- How to Start
  - Current Presentation

- When to Stop
  - Continuous Monitoring
3 Different Approaches

1. No Selection Criteria

2. Disease Burden Centric

3. Safety Centric
Unexpected 20% Postop Mortality!!

Clinical characteristics and outcomes of patients undergoing surgeries during the incubation period of COVID-19 infection.

Lei S1, Jiang F2,3, Su W1, Chen G4, Chen J5, Mei W6, Zhan L Y1, Jia Y1, Zhang L7, Liu D7, Xia Z Y1, Xia Z2,3,7.

COVID-19 Outbreak and Surgical Practice: Unexpected Fatality in Perioperative Period.

Aminian A4, Safari S2, Razeghian-Jahromi A5, Gorbani M4, Delaney CP1.
1. No Selection Criteria

- First come, first served
- Pre COVID-19 era approach
2. Disease Burden Centric

- HbA1c ≥8% on two or more oral medications
- Insulin use
- History of cardiovascular disease
- Non-alcoholic steatohepatitis or two or more other metabolic conditions increasing cardiovascular risk
- Albuminuria or chronic kidney disease (stage 3 or 4)
- >5 years of diabetes history

- BMI ≥30 kg/m²
- More than two other metabolic conditions (other than type 2 diabetes) increasing cardiovascular risk (ie, non-alcoholic steatohepatitis or hypertension)
- Severe obesity hypoventilation syndrome
- Severe obstructive sleep apnoea
- Heart failure (AHA stage C)
- Chronic kidney (stage 3 or 4)

Resource utilization (LOS, ICU, transfusion)

Extremely challenging if they develop postop COVID-19 pneumonia
3. Safety Centric

• Adopted by Cleveland Clinic and many other places

• Aligns with established bariatric risk data/prediction models, recent guidelines from ACS, and consensus amongst 8 surgeons in 4 CCF bariatric programs in OH

  – Risk factors for complications after bariatric surgery
  – Risk factors for developing severe form of COVID-19
<table>
<thead>
<tr>
<th></th>
<th>Tier 1 LOW RISK</th>
<th>Tier 2 INTERMEDIATE RISK</th>
<th>Tier 3 HIGH RISK</th>
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<tbody>
<tr>
<td>Condition</td>
<td>Must meet all conditions below.</td>
<td>If not considered as Tier 1 and Tier 3. Other eligibility criteria are listed below.</td>
<td>If meets any of these conditions below.</td>
</tr>
<tr>
<td>Type of surgery</td>
<td>Primary bariatric procedure without other major concurrent procedures</td>
<td>Lower risk revisional procedures:</td>
<td>Revisional surgery in patients with prior open bariatric surgery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Conversion of gastric band or sleeve to other procedures</td>
<td>- Conversion of VBG to other procedures</td>
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<td></td>
<td>- Concurrent procedures such as paraesophageal hernia repair</td>
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<td>- Procedures with higher than average risk for conversion to open surgery,</td>
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<td>blood transfusion, and prolonged length of stay (e.g. hostile abdomen)</td>
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<td>Suggested age cutoff</td>
<td>&lt;60 years</td>
<td>&gt;60 years</td>
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<tr>
<td>Suggested BMI cutoff</td>
<td>&lt;55 kg/m²</td>
<td>≥55 kg/m²</td>
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<td>ASA class</td>
<td>No ASA Class 4</td>
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<tr>
<td>Mobility</td>
<td>No mobility restriction</td>
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<tr>
<td>Diabetes</td>
<td>No diabetes or controlled type 2 diabetes</td>
<td>- Poorly controlled diabetic (HbA1c &gt;8%)</td>
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<td></td>
<td></td>
<td>- Need for high dose insulin</td>
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<td>- Type 1 diabetes</td>
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<td>Condition</td>
<td>Requirement</td>
<td>Conditions/Notes</td>
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</table>
| Hypertension                      | No hypertension or controlled (<140/90 mmHg) with one or two antihypertensive agents | Stable heart disease:  
- Stable coronary artery disease  
- Controlled atrial fibrillation or other arrhythmias  
Significant history of heart disease:  
- Previous myocardial infarction  
- Heart failure  
- Ejection fraction <40%  
- Previous cardiac stents requiring continuing perioperative antiplatelet medications |
| Cardiac disease                   | No underlying heart disease                                                 | Mildly impaired pulmonary function tests (FEV1 ≥80% predicted value)  
- Moderately or severely impaired pulmonary function tests (FEV1 <80% of predicted value)  
- Need for home oxygen |
<p>| Lung disease                      | No underlying lung disease                                                  |                                                                                |
| Obstructive sleep apnea           | No severe OSA (AHI ≥30)                                                     |                                                                                |
| Renal disease                     | No CKD Stage 3, 4 or 5                                                       | On dialysis                                                                     |
| Liver disease                     |                                                                             | Cirrhosis ± portal hypertension                                                 |
| Immunosuppression including steroids | Not on immunosuppressive medications                                 | On immunosuppressive medications                                                |
| Anticoagulant                     | Not on anticoagulant                                                         |                                                                                |</p>
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<td>Mildly impaired pulmonary function tests (FEV1 ≥80% predicted value) - Moderately or severely impaired pulmonary function tests (FEV1 &lt;80% of predicted value) - Need for home oxygen</td>
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<td>No CKD Stage 3, 4 or 5</td>
<td>On dialysis</td>
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<tr>
<td>Liver disease</td>
<td></td>
<td>Cirrhosis ± portal hypertension</td>
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<tr>
<td>Immunosuppression including steroids</td>
<td>Not on immunosuppressive medications</td>
<td>On immunosuppressive medications</td>
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Our First 100 Patients at Cleveland Clinic

- 40% in Tier 1
- 25% in Tier 2
- 35% in Tier 3
Key Principles (individualized in each practice setting)

• Risk Classification of patients

• Start cases in lowest risk group (Tier 1)

• Slower than average case volumes initially

• Strict social distancing

• Preoperative COVID-19 testing in ALL patients

• Consider perioperative chest CT in SELECTED cases

• Constant monitoring and analysis of real time data
Take Home Message

Our Reality:
Some patients will develop COVID-19 in perioperative period

Our Goal:
Decrease perioperative incidence
Decrease risk of protracted postop course if they develop COVID

Our Strategy:
Slow & selective restarting of practice until we learn more
Questions?

? Please submit questions and they will be answered during the panel at the end....
COVID19
Non-urgent Procedural Reboot

Geisinger
Agenda

- Regulatory Guidance
- Resumption of Non-Urgent Surgical Procedures
- Preoperative COVID Testing
- Opportunities
Regulatory Guidance
Regulatory Guidance

Multisociety Joint Statement: Roadmap for Resuming Elective Surgery after COVID-19

- April 17, 2020
- American College of Surgeons
- American Society of Anesthesiologists
- Association of perioperative Registered Nurses
- American Hospital Association

1) Sustained reduction in rate of new COVID-19 cases in the relevant geographic area for at least 14 days

2) Prioritization Scoring System
Regulatory Guidance

Multisociety Joint Statement: Roadmap for Resuming Elective Surgery after COVID-19 Pandemic

- April 17, 2020
- American College of Surgeons
- American Society of Anesthesiologists
- Association of perioperative Registered Nurses
- American Hospital Association

1) Sustained reduction in rate of new COVID-19 cases in the relevant geographic area for at least 14 days

2) Prioritization Scoring System

**Tier I**
Procedures planned for clinical conditions that pose an emergency or urgent threat to life and limb or serious threat of clinical deterioration

**Tier II**
Procedures planned for clinical conditions that pose a non-urgent threat of clinical deterioration.

**Tier III**
Procedures planned for clinical conditions that pose little or no threat of clinical deterioration. (example: cosmetic procedures or those for asymptomatic conditions)
Regulatory Guidance

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1) Sustained reduction in rate of new COVID 19 cases in the relevant geographic area for at least 14 days

2) Prioritization Scoring System

Anesthesia
- Local
- Regional
- General

Preauthorization
- Ambulatory
- Overnight (SORU)
- Inpatient (ZPO)
  - Length of Stay
  - EBL

Disposition
- Home
- Med/Surg
- ICU
# Bariatric Surgery

**Multisociety Joint Statement: Roadmap for Resuming Elective Surgery after COVID-19 Pandemic**

## Anesthesia
- Local
- Regional
- General

## Preauthorization
- Ambulatory
- **Overnight (SORU)**
- Inpatient (ZPO)
  - Length of Stay
  - EBL

## Disposition
- Home
- **Med/Surg**
- ICU

### Tier I
- ... serious threat of clinical deterioration
- Revisions, aspiration risk, loss of benefits

### Tier II
- ... non-urgent threat of clinical deterioration
- DM, OSA, HTN, GERD, Hyperlipidemia, ...

### Tier III
- ... N/A
Preoperative COVID Testing
# Definition of COVID Status

## Positive

**COVID (+)**

1) Positive RT PCR test with ongoing symptoms as defined by the CDC
   - Fever > 100.4
   - New Onset Cough
   - New Onset Shortness of Breath
   - Flu-like Illness (FLI) or recent loss of taste or smell

2) Positive PCR test and ≤ 14 days from symptom onset

**Presumed COVID (+)**

1) No CV test or CV test pending at time of surgery and any one of the following symptoms
   - Fever > 100.4
   - New Onset Cough
   - New Onset Shortness of Breath
   - Flu-like Illness (FLI) or recent loss of taste or smell

2) Asymptomatic and history of close contact with COVID (+) patient w/in 2 weeks (without appropriate PPE)

## Negative

**COVID (-) ... if ALL of the following**

1) Negative response to all symptom screening questions on day of surgery
   - Fever > 100.4
   - New Onset Cough
   - New Onset Shortness of Breath
   - Flu-like Illness (FLI) or recent loss of taste or smell

2) Negative PCR test when available

3) History of self-quarantine from time of test to time of surgery

**Presumed COVID (-) ... if ALL of the following**

1) No CV test or CV test pending at time of surgery and none of the following symptoms on day of surgery
   - Fever > 100.4
   - New Onset Cough
   - New Onset Shortness of Breath
   - Flu-like Illness (FLI) or recent loss of taste or smell

2) No history of close contact with COVID (+) patient w/in 2 weeks (without PPE)
## Perioperative protocol for Tier II (nonurgent) operative procedures

### COVID (+) & Presumed COVID (+)

- Will postpone procedures for at least 28 days after onset of symptoms and should be symptom-free for at least 14 days.

### COVID (-) & Presumed COVID (-)

- Must meet the **screening definitions of COVID (-)** immediately prior to surgery.

- Will phase in **RT PCR COVID-19 testing ≤ 48 hours prior** to scheduled procedures. Result must be negative.

- Must **self-quarantine** from time of COVID-19 testing until time of procedure.

- Recommend **no “close contact”** with known COVID (+) patient for 14 days prior to procedure.

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![Graph showing proportion of symptomatic cases over days since infection](image-url)
COVID (+) Pathway

**Tier I**

- Covid (+)
- Presumed COVID (+)

  - Proceed
    - Follow PPE Guidelines
    - Negative Pressure Ante OR
    - ONLY Anesthesia present for intubation
    - Post op
      - Transport Intubated
      - Extubate in Recover in OR

**Tier II**

- COVID (+)
- Presumed COVID (+)

  - Postpone
    - (> 28 Days)
      - Follow PPE Guidelines
      - Perform COVID pcr Testing
      - Escort with social distancing
COVID (-) Pathway

ALL TIERS

COVID (-)  
Presumed COVID (-)  

Proceed

- Routine PPE Guidelines
- Anesthesia Guidelines
- Routine Transport

Will continue to observe specific high risk guidelines for intubation and aerodigestive procedures
Resumption of Non-Urgent Surgical Procedures
Guiding Principles

1) **Transparency**: continuous communication with our staff, patients, community as well as regulatory agencies

2) Continuous monitoring of COVID-19 in community and Geisinger facilities
   - Inpatient hospital bed availability - including ICU
   - All sites must be prepared to adjust Phase based on capacity and prevalence of COVID-19

3) Continuous monitoring of PPE and blood supply through a real time Supply Chain Dashboard

4) Standardized Tiering of cases

5) Phased resumption of non-urgent surgery

6) Support employee health and wellness through RISE and other resources
Phased Implementation

Phase 1

- Ambulatory surgery
- Postop Disposition – Home
- COVID (-) or presumed COVID (-) Status
- Ambulatory Surgery Centers
- Capacity
- Target date- May 11, 2020 (x)
- Anesthesia – ALL
- Prioritization
  - TIER I cases will continue to be prioritized at all sites
  - TIER II cases
    - Acuity metrics will be determined and prioritized within department/division.
    - EXCLUSION of cases at high risk of aerosolization – Phase in
- System standard clinical documentation

Phase 1B

- Ambulatory surgery
- Postop Disposition – Home
- COVID (-) or presumed COVID (-) Status
- ALL surgery sites that meet regional hospital and community COVID-19 prevalence criteria
- Capacity
- Target date- (x + <2 days)
- Anesthesia – ALL
- Prioritization
  - TIER I cases will continue to be prioritized at all sites
  - TIER II cases
    - Acuity metrics will be determined and prioritized within department/division.
    - EXCLUSION of cases at high risk of aerosolization – Phase in
- System standard clinical documentation
Phased Implementation

Phase 2
- **Overnight** and Ambulatory surgery
- **Postop Disposition** – Home or Med/Surg
- COVID (-) or presumed COVID (-) Status
- ALL surgery sites that meet regional hospital and community COVID-19 prevalence criteria
- Capacity
- **Target date- (x + ≥7 days)**
- Anesthesia – ALL
- Prioritization
  - TIER I cases will continue to be prioritized at all sites
  - TIER II cases
    - ALL
- System standard clinical documentation

Phase 3
- **All (Ambulatory, Overnight and Inpatient)** surgery
- Postop Disposition – Home, Med/Surg and ICU
- COVID (-) or presumed COVID (-) Status
- ALL surgery sites that meet regional hospital and community COVID-19 prevalence criteria
- Capacity
- **Target date- (x + 14-21 days)**
- Anesthesia – ALL
- Prioritization
  - TIER I cases will continue to be prioritized at all sites
  - TIER II cases
    - ALL
- System standard clinical documentation

Phase 4  Tier III cases
“In the middle of difficulty lies opportunity”
Albert Einstein
Questions?

Please submit questions and they will be answered during the panel at the end....
ASMBS Webinars: Available online

April 14: “COVID-19 Updates from the ASMBS”

April 21: “Embracing Telehealth”

April 28: “Restarting Surgery: Issues to Consider”


https://asmbs.org/resources/covid-19-updates-from-asmbs
https://asmbs.org/resources/covid-19-updates-embracing-telehealth
https://asmbs.org/resources/restarting-surgery-issues-to-consider
Going Forward:

- Regularly scheduled webinars with issues important to our members:

  **Next Webinar:**
  *Tuesday May 26th 6 pm EST*

*Please let us know what matters most to you!*

*communications@asmbs.org*

*Please share with us stories of how your colleagues are making an impact!*
ASMBS COVID-19 UPDATES:
RESTARTING SURGERY - ISSUES TO CONSIDER IN PRIORITIZING CASES
Tuesday May 19th at 6PM EST

PRESENTERS:
Ali Anninian, MD FASMBS
Vivek Parashar, MD

MODERATOR:
Matt Hutter, MD, MPH, FASMBS
President

PANELISTS:
Anthony Pechick, MD FASMBS
Christopher DiGiac FRCSC FACS FASMBS

COVID – 19 Updates:Restarting Surgery – Issues to Consider in Prioritizing Cases

• Support your patients.
• Use the opportunity to transform how we provide care.
• Restart safely

Stay safe!