Anesthesia Screening Criteria and Management for GI Endoscopy Patients

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I have no financial disclosures.

Outline
- Pre-operative evaluation
- Medication management
- ASC exclusion criteria
- Anesthetic management
- The unique GI patient
Why do we need an H&P?

CMS requirement: <30 days in advance
“Clearance”
PCP goals
- communicate to anesthesiologists
- risk stratify
- medically optimize
- coordinate with specialists

Organ System Pre-operative Evaluation
- Neurologic
- Cardiac
- Pulmonary
- Renal
- Hematologic
- Endocrine
- GI
Neurologic considerations

- Mental/cognitive status
- Seizure history
- Stroke history
- Psychiatric disease
- Chronic pain
- Misc: MS, Myasthenia Gravis
- Alcoholism & Illicit drugs

Neurologic medications

Continue:
- Alzheimer's/dementia, Parkinson's agents
- Opioids, Anxiolytics
- Anti-seizure agents
- Myasthenia gravis

Cardiac considerations

- CAD history & signs/symptoms
- Cardiomyopathy; AICD/PPM
- Arrhythmia
- Valvular disease
- Hypertension
- Exertional capacity
AURORA ECG CRITERIA

Cardiac medications
Continue:
- Htn & Pulmonary Htn meds
- Statins
- Antiarrhythmics
Hold:
- ACEI/ARBS
- Diuretics
- Non-statin lipid agents

Pulmonary considerations
- Smoking history
- COPD/Asthma
- Oxygen dependence
- Recent URI/PNA
- OSA
STOPBANG Criteria

Pulmonary medications
Continue:
- Inhalers
  - beta-agonists, corticosteroids, anti-cholinergics
- Oxygen
- CPAP machine

Renal considerations
- Chronic renal disease
- ESRD
- Chronic electrolyte abnormalities
- Diuretics
Renal medications

Continue:
- BPH agents
- Gout agents

Consider:
- Diuretics (CHF)
- Electrolyte supplementation

Hematology considerations

- Anemia - acute/chronic
- Anticoagulants
- Bleeding disorders

Hematology medications

- Related to GI issue?
- Coordination with managing physician
  - CAD
  - Arrhythmia
  - CVD
  - Thromboembolism
  - Hypercoagulable disease
Endocrine considerations

- Thyroid disease
- Diabetes; insulin
- Chronic steroid use

Endocrine medications

Continue:
- thyroid agents
- corticosteroids

Consider:
- oral diabetic agents

Insulin

- Vary on individual basis
- Pump: continue basal rate on DOS
- Short acting: hold on DOS
- NPH: half dose
- Mixed: hold on DOS
- Long acting: take half dose
GI considerations

- Reason for procedure (elective, non-elective)
- GERD, ulcer, hiatal hernia, pain, gastroparesis, stricture, diarrhea/constipation
- Cirrhosis, varices, hepatitis, jaundice
- Anemia
- Colitis, C. difficile
- Obesity

GI medications

Continue:
- H2, PPI
- Prokinetic agents
- Serotonergic agents
- Anti-inflammatories

Consider:
- Antacids
- Phentermine

Anesthesia Evaluation - History

- Importance
- Family history - MH
- Personal history
  - PONV, awareness, difficult airway, vascular access, med response
- PONV risk factors
  - Young females, gyn surgery, non-smokers, laparoscopic surgery, opiate use
Anesthesia Evaluation - Airway Exam

- History difficult intubation
- Mallampati score
- Thyromental distance
- Mouth opening, incisor length
- Neck circumference & mobility
- History of H&N surgery/radiation

Mallampati Score

ASC vs Hospital

- Dynamic guidelines
- Increasingly lax criteria
- Lab testing

- Who can’t come:
  - sickle cell
  - MH (family) history
  - active TB
  - recent MI/stroke
  - in-progress cardiac workup
  - cardiac assist devices
Anesthetic Management of Endoscopy

- It’s a form of art!
- Pre-sedation (midazolam, fentanyl, benadryl)
- Maintenance (propofol, ketamine, precedex)
- General (uh oh!)

Propofol - milk of amnesia

- Most common agent
- CNS inhibition (via GABA)
- Anti-emetic, anti-convulsant
- Cardiovascular depressant
- Dose-dependent respiratory depression
- Quick on/quick off

The Unique GI Patient

- General without airway (obstruction, secretions, GI contents)
- MAC - complicated patients
- Increased risk of aspiration
- Altered drug metabolism (liver)
- Bowel prep
References

Aurora Southern Lake Surgery Center Admission Criteria, 2017.