

**An Overview of Perioperative Medicine 2018:  
From Outpatient Preoperative Assessment to Inpatient Postoperative Care**

WEDNESDAY, OCTOBER 10, 2018

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**6:00 a.m. Continental Breakfast and Registration**

**Perioperative Medicine Introductory Topics**

**7:30 a.m. Welcome and Course Overview**

**7:45 a.m. Perspectives on the Multi-Disciplinary Approach to Perioperative Medicine**

- What are the roles of the medical consultant?
- What should a preoperative evaluation include?
- How can a multidisciplinary approach optimize patient care?

**8:15 a.m. Anesthesia Alerts for the Non-Anesthesiologist**

- What does the medical consultant need to know about paralytic agents and the physiologic effects of anesthesia?
- Do we still need to perform flexion and extension films of the neck for patients with RA or Down Syndrome?
- What evidence is there to guide the “infield” vs “outfield” decision?
- What are the updates to the fasting guidelines?
- How do I accurately assign an ASA score?

**Perioperative Cardiovascular Medicine Topics, Part 1**

**8:45 a.m. Cardiac Risk Assessment: Using Guidelines to Direct Practice**

- How do I apply the current ACC/AHA guidelines to preoperative cardiac risk assessment?
- Should I use the Gupta or the RCRI cardiac risk calculator?
- Does it matter which stress test I order?
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**9:15 a.m. Cardiac Risk Reduction Strategies – Medical and Interventional**

- What are the risks of general vs spinal anesthesia with respect to cardiac outcomes?
- What is the evidence for perioperative beta-blocker, statin and alpha-2-agonist use?
- When is cardiac revascularization indicated prior to non-cardiac surgery?
- How long should patients wait to have surgery after MI or revascularization?

**9:45 a.m. Challenge the Experts Case #1**

**10:00 a.m. Question and Answer Session**

**10:15 a.m. Refreshment Break**

**Perioperative Medication and Fluid Management Topics**

**10:30 a.m. Understanding Perioperative Fluid Management**

- What is unique about fluid management perioperatively?
- Which is better-- liberal or restrictive fluid management?
- What type of fluid is optimal?

- 11:00 a.m.      Perioperative Medication Management: Prescription & Non-Prescription Medication**
- What issues need to be considered with perioperative medication management?
  - What are some drugs that need to be held for surgery?
  - What are the issues with some of the newer weight loss drugs?
  - What should I recommend to my patients regarding dietary supplements perioperatively?

**11:45 a.m.      Question and Answer Session**

**12:00 p.m.      Lunch on Your Own**

### **Perioperative Pain Management and Substance Use Topics**

- 1:30 p.m.      Pain Management in the Perioperative Period**
- What are the commonly used opioids in the postoperative setting and what issues should I consider when prescribing these?
  - What are the common PCA doses for postoperative pain control?
  - When should I consider adjunctive analgesic therapies to help with pain control?
  - How should patients on multiple sedating medications postoperatively be monitored?

- 2:00 p.m.      Managing the Patient with Perioperative Substance Use Disorders**
- How do I screen for substance abuse preoperatively?
  - What are the specific issues with common drugs of abuse such as methamphetamine, heroin, cocaine and alcohol?
  - When should an elective surgery be postponed in a patient with substance abuse?
  - How do I manage patients on Suboxone and methadone perioperatively?
  - How can I use prescription monitoring programs in the perioperative setting?

**2:30 p.m.      Challenge the Experts Case #2**

**2:45 p.m.      Question and Answer Session**

**3:00 p.m.      Refreshment Break and Move to Concurrent Sessions**

### **Concurrent Sessions**

- 3:15 p.m.      Perioperative Question and Answer Module**
- 15 board style rapid review questions spanning perioperative medicine
  - Question handout and use of the audience response system
  - Opportunity for discussion and interaction with colleagues and course faculty

#### **Development of a Preoperative Clinic**

- Who are the key stakeholders?
- What is needed at the institutional level?
- What are the nuts and bolts of scheduling, use of templates and follow-up?
- What are the pearls and pitfalls?

**Perioperative Shorts**

- How do I manage non-cardiac devices perioperatively?
- What are the special perioperative considerations in cancer patients?
- What are the physiologic effects of laparoscopic surgery and patient positioning?
- What is important in managing bariatric surgery patients?

**Enhanced Recovery After Surgery (ERAS)**

- What are the key elements of ERAS?
- What is the rationale for the ERAS model?
- Are patient outcomes better with ERAS?
- What is the future of “fast-track” programs?

**4:15 p.m. Reception and “Consult Guys” Presentation: The Myths of Perioperative Care**  
(CME credit will not be provided for this event)

**5:00 p.m. Adjourn**

THURSDAY, OCTOBER 11, 2018

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**6:30 a.m. Continental Breakfast**

**7:00 a.m. Breakfast with the Professor Case Discussions: Informal Q & A with course**

**Perioperative Cardiovascular Medicine Topics, Part 2****8:00 a.m. Management of Non-CAD Heart Disease in Non-Cardiac Surgery**

- How do I manage a patient with valvular heart disease perioperatively?
- How soon after valve replacement can non-cardiac surgery be performed?
- What issues need to be considered for a patient with heart failure preoperatively?
- What are the issues with preoperative hypertension?
- What are the preoperative issues for patients with chronic atrial fibrillation?
- What perioperative issues need to be considered in a patient with hypertrophic cardiomyopathy?
- What perioperative issues need to be considered in a patient with pulmonary hypertension?
- What are the indications for a temporary pacemaker in the perioperative period?
- How do I manage pacemakers and CIEDs in the perioperative period?

**8:45 a.m. Perioperative Cardiology Clinical Shorts**

- What are the guidelines on perioperative management of antiplatelet agents?
- When are preoperative ECGs and echocardiograms indicated?

- 9:15 a.m. Managing Postoperative Cardiac Complications**
- Which patients should have an ECG and/or troponin surveillance for postoperative MI?
  - How do I manage hyper- and hypotension postoperatively?
  - What are the precipitating factors for postoperative arrhythmias and conduction disorders and how do I manage them?
  - Which surgeries and patients have high risk for postoperative atrial fibrillation? Are there ways to prevent postoperative atrial fibrillation? How do I manage postoperative atrial fibrillation?
  - How do I diagnose and manage postoperative myocardial ischemia and infarction?
  - How important is “troponin leak” postoperatively?
  - What special perioperative management is needed for patients with heart failure (systolic heart failure and heart failure with preserved ejection fraction)?

**10:00 a.m. Challenge the Experts Case #3**

**10:15 a.m. Question and Answer Session**

**10:30 a.m. Refreshment Break**

### **Perioperative Potpourri – Infectious Disease and Rheumatology**

- 10:45 a.m. Perioperative Infectious Disease Issues**
- How do I approach the postoperative fever workup?
  - Which patients need antibiotic prophylaxis perioperatively and for how long?
  - Do I need to order a urinalysis and culture prior to total joint surgery?
  - How are patients with penicillin allergy managed in the perioperative period?
  - How do I manage common postoperative infectious disease issues?
  - Is there a role for the use of probiotics to prevent postoperative infections?
- 11:15 a.m. Perioperative Rheumatology Considerations**
- How do I manage DMARDS and other rheumatologic medications?
  - What are the perioperative risks associated with rheumatologic diseases?
  - How do I diagnose and manage acute crystalline arthritis in the surgical patient?
- 11:45 a.m. Preoperative Testing, A Clinical short**
- 12:05 p.m. Question and Answer Session**
- 12:20 p.m. Lunch on Your Own**

## Perioperative Pulmonary Medicine Topics

- 1:45 p.m. Preoperative Pulmonary Risk Stratification and Risk Reduction Strategies**
- Which factors contribute to pulmonary risk in non-cardiac surgery?
  - Which pulmonary risk index best predicts postoperative pulmonary complications: ARISCAT, Arozullah, Gupta or LIPPSMack POP?
  - When is pulmonary testing recommended preoperatively?
  - What measures can be employed to help minimize postoperative pulmonary complications in at-risk patients?
  - Do pre-habilitation and inspiratory muscle training have a role in some patients?
  - What are the basic tests to consider when evaluating a patient for lung resection surgery?
  - Which patients should be referred to a pulmonary specialist for preoperative evaluation?
  - How long should surgery be postponed after pneumonia or other upper respiratory infections?
- 2:15 p.m. Management of Documented or Suspected Obstructive Sleep Apnea in Patients Undergoing Non-Cardiac Surgery**
- What are the consequences of OSA in the perioperative period?
  - What factors increase risk of postoperative complications in patients with OSA?
  - How should patients be screened for OSA?
  - What are the risks of obesity hypoventilation syndrome?
  - Which patients need to be tested prior to surgery to decrease the risk of potential complications?
  - Which patients can be treated as “presumed” OSA and proceed with surgery with additional precautions?
  - Are there guidelines available to help guide management of patients with OSA in the perioperative period?
  - What postoperative monitoring is recommended for patients with suspected or confirmed OSA?
- 2:45 p.m. Management of Postoperative Pulmonary Complications**
- What are the most common postoperative pulmonary complications?
  - How do I diagnose and treat fat embolism syndrome?
  - How do I minimize or treat pulmonary complications in the postoperative period?
  - When should non-invasive ventilation considered?
- 3:15 p.m. Challenge the Experts Case #4**
- 3:30 p.m. Question and Answer Session**
- 3:45 p.m. Refreshment Break and Move to Concurrent Sessions**

## Concurrent Sessions

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**5:00 p.m. Adjourn**

FRIDAY, OCTOBER 12, 2018

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**6:30 a.m. Continental Breakfast**

**7:00 a.m. Breakfast with the Professor Case Discussions: Informal Q & A with course faculty**

### **Perioperative Vascular Medicine Topics**

**8:00 a.m. DVT/PE Prophylaxis in the Surgical Patient I:**

#### **The ACCP Guidelines and the Internist's Perspective**

- What are the patient- and surgery-related risk factors for perioperative DVT: Caprini vs ACCP risk stratification?
- What do the ACCP guidelines recommend for DVT prophylaxis in surgical patients?
- When is extended DVT prophylaxis indicated?
- How does renal function affect the management of DVT prophylaxis?
- How to prophylaxis patients with hereditary coagulation disorders or previous history of VTE not taking long term oral anticoagulants undergoing major surgery?

**8:30 a.m. DVT/PE Prophylaxis in the Surgical Patient II:**

#### **The AAOS Guidelines and the Orthopedist's Perspective**

- What concerns do orthopedists have about DVT prophylaxis as recommended by the ACCP?
- What are the AAOS Guideline recommendations for DVT prophylaxis in orthopedic surgical patients?
- When is extended DVT prophylaxis indicated and which agent is best?

- 9:00 a.m.      Perioperative Management of Target Specific Oral Anticoagulants**
- How long should I hold dabigatran, rivaroxaban or apixaban before surgery?
  - Now that some reversal agents are available, should we routinely be using these to expedite DOAC reversal preoperatively in patients who need urgent surgery?
  - When should target specific oral anticoagulants be restarted postoperatively?
  - Do patients on target specific oral anticoagulants need to be bridged?
  - How do I manage prolonged DVT prophylaxis in patients who are also taking dabigatran, rivaroxaban, edoxaban or apixaban?
  - How should we reverse these agents if major bleeding occurs?
- 9:30 a.m.      Challenge the Experts Case #5**
- 9:45 a.m.      Question and Answer Session**
- 10:00 a.m.      Refreshment Break**

### Perioperative Vascular Medicine and Hematology Topics

- 10:15 a.m.      Perioperative Management of Anticoagulants (Warfarin): To Bridge or Not to Bridge**
- Which patients with atrial fibrillation need bridging anticoagulation perioperatively?
  - Which patients with mechanical heart valves need bridging anticoagulation perioperatively?
  - Can you recommend an approach to anticoagulation dosing and the timing of bridging?
  - How and when should anticoagulation be restarted after surgery?
- 10:45 a.m.      Common Hematology Issues in the Perioperative Period**
- Which transfusion strategy is best in the perioperative period—conservative or liberal?
  - What should trigger transfusion in the postop period?
  - When is FFP indicated preoperatively?
  - What is the role of platelet transfusion in patients taking antiplatelet agents who need emergent or urgent surgery?
  - How do I diagnose and treat heparin induced thrombocytopenia in the perioperative period?
  - How do I manage non-HIT thrombocytopenia?
  - How do I manage patients with sickle cell disease perioperatively?

### Perioperative Neurology and Geriatric Topics

- 11:15 a.m.      Perioperative Care of the Elderly Patient**
- How old is too old to consider surgery?
  - How is the frailty index used to identify patients at risk of postoperative complications?
  - What are the risk factors and preventive measures for postoperative delirium?
  - What diagnostic workup is recommended for patients with suspected postoperative delirium?
  - Do DNR orders need to be suspended prior to surgery and if so, when should DNR orders be reinstituted postoperatively?
- 11:45 a.m.      Managing Patients with Neurologic Disease in the Perioperative Period**
- How do I manage patients with seizure disorder in the perioperative period?
  - How do I manage patients with Parkinson's disease perioperatively?
  - What do I do if I find an asymptomatic carotid bruit during a preoperative evaluation?
  - How do I determine appropriate timing for elective surgery after ischemic stroke?
  - What are the symptoms and risk factors for serotonin syndrome in the perioperative setting?

**12:15 p.m. Challenge the Experts Case #6**

**12:30 p.m. Question and Answer Session**

**12:45 p.m. Adjourn**

**SATURDAY, OCTOBER 13, 2018**

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**6:30 a.m. Continental Breakfast**

**7:00 a.m. Breakfast with the Professor Case Discussions: Informal Q & A with course faculty**

### **Perioperative Endocrine and Renal Topics**

**8:00 a.m. Managing the Diabetic Patient in the Perioperative Period**

- Should I be screening for diabetes preoperatively in patients who are at risk?
- When would I recommend postponing an elective surgical procedure because of poor diabetic control?
- How should I manage patients on insulin therapy in the perioperative period?
- How should I manage patients on oral hypoglycemics in the perioperative period?
- How should I manage patients on insulin pumps in the perioperative period?
- What is the optimal glycemic control in the postop setting?

**8:30 a.m. Perioperative Management of the Patient with Kidney Disease**

- What perioperative issues do I need to consider for a patient with advanced kidney disease?
- How do I prevent acute kidney injury in the perioperative period?

**9:00 a.m. Perioperative Management of Endocrine Issues: Stress Dose Steroids, Adrenal Insufficiency, Thyroid Disease**

- What issues do I need to consider in patients with hypothyroidism or hyperthyroidism in the perioperative period?
- Who is at risk for adrenal insufficiency perioperatively?
- How do I determine the need for and the dose of stress dose steroids in the surgical patient?

**9:30 a.m. Challenge the Experts Case #7**

**9:45 a.m. Question and Answer Session**

**10:00 a.m. Refreshment Break and Hotel Checkout**

### **Perioperative Gastrointestinal and Nutrition Topics**

**10:30 a.m. Perioperative Management of the Patient with Liver Disease**

- How do I approach preoperative risk assessment in a patient with liver disease?
- Which patients with liver disease may not be good candidates for elective surgery due to significant increase perioperative morbidity and mortality?
- What are the common postoperative management challenges for patients with advanced liver disease?
- What do I need to know about managing the transplant patient undergoing non-cardiac surgery?



- 11:00 a.m. Management of Postoperative Gastrointestinal Complications**
- How do I prevent and manage postoperative nausea and vomiting?
  - How should I evaluate a patient with postoperative diarrhea?
  - What agents are recommended to prevent stress related mucosal disease in the surgical patient?
  - How do I manage postoperative constipation and postoperative ileus?
- 11:30 a.m. Perioperative Nutrition Considerations**
- What patients might benefit from a preoperative nutrition consultation?
  - What preoperative testing is useful to assess nutritional status?
  - Does optimizing nutrition preoperatively improve outcomes?
  - When should patients receive TPN in the perioperative setting?
  - What can be done postoperatively?
- 12:00 p.m. Question and Answer Session**
- 12:15 p.m. Adjourn!**