

**An Overview of Perioperative Medicine 2019:
From Outpatient Preoperative Assessment to Inpatient Postoperative Care**

WEDNESDAY, OCTOBER 23, 2019

6:00 a.m. Registration and Continental Breakfast

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?
- What evidence is there to guide the “infield” vs “outfield” decision?
- How do I counsel my patients about energy drinks, alcohol and nicotine the night before surgery?
- 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?
- What is the significance of the METS trial?

9: 30 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?

10:00 a.m. Challenge the Experts Case #1

10:15 a.m. Question and Answer Session

10:30 a.m. Refreshment Break

Perioperative Medication and Fluid Management Topics

10:45 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?

- 11:15 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 – Insights from Anesthesia/Pain Medicine and Hospital Medicine**
- What are the key issues in patients on chronic opioids preoperatively?
 - 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 multi-modal analgesia to help with pain control?
 - How should patients on multiple sedating medications postoperatively be monitored?

- 2:15 p.m. Managing the Patient with Perioperative Substance Use Disorders**
- How do I screen for substance use preoperatively?
 - What are the perioperative issues with the use of common substances such as methamphetamine, heroin, cocaine, marijuana and alcohol?
 - When should an elective surgery be postponed in a patient with substance use?
 - How do I manage patients on Suboxone and methadone perioperatively?
 - How can I use prescription monitoring programs in the perioperative setting?

3:00 p.m. Challenge the Experts Case #2

3:15 p.m. Question and Answer Session

3:30 p.m. Refreshment Break

Perioperative Clinical Shorts Series 1 – Special Populations and Perioperative Scenarios

- 3:45 p.m. Preoperative Anemia and Iron Therapy**
- When should I consider perioperative iron therapy and how is it administered?
- Non-Cardiac Device Management**
- How do I manage non-cardiac devices perioperatively, such as deep brain stimulators, pain pumps, acupressure devices, etc?
- Hip Fractures in Complex Elderly Patients**
- How do I manage hip fracture patients who need urgent orthopedic surgery?
- Laparoscopic Surgery and Patient Positioning – Why it Matters**
- What are the physiologic effects of laparoscopic surgery and patient positioning in the OR?

4:45 p.m. Wine Reception and “Consult Guys” Presentation: The Myths of Perioperative Care
(CME credit will not be provided for this event)
Geno J. Merli, M.D. and Howard H. Weitz, M.D.

5:30 p.m. Adjourn

THURSDAY, OCTOBER 24, 2019

6:30 a.m. Continental Breakfast

7:00 a.m. Breakfast with the Professor Case Discussions: Informal Q & A with Wednesday’s Course Faculty

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

- How might the Canadian and European guidelines impact my practice?
- 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 Infectious Disease, Rheumatology, and Preoperative Testing

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 Clinical short

- What are the indications for a preoperative CBC, electrolytes or creatinine?
- When should coagulation studies be obtained?
- When should liver function tests be ordered?

12:00 p.m. Question and Answer Session

12:15 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?

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 be considered?

3:15 p.m. Challenge the Experts Case #4

3:30 p.m. Question and Answer Session

3:45 p.m. Refreshment Break

Clinical Shorts Part 2 – Emerging Perioperative Practice Optimizing Opportunities

4:00 p.m. Prehabilitation

- Does exercise prehabilitation have a role in some patients prior to surgery?

The Perioperative Surgical Home

- Who are the stakeholders and what are the benefits of the surgical home model?

Myocardial Injury After Noncardiac Surgery (MINS)

- Is MINS significant and is there any evidence-based treatment?

Recognizing and Addressing Frailty

- How is the frailty index used to identify patients at risk of postoperative complications?

5:00 p.m. Adjourn

FRIDAY, OCTOBER 25, 2019

6:30 a.m. Continental Breakfast

7:00 a.m. Breakfast with the Professor Case Discussions: Informal Q & A with Thursday's 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 Direct 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. Question and Answer Session**
- 9:45 a.m. Refreshment Break**

Perioperative Vascular Medicine and Hematology Topics

- 10:00 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?
- 10:30 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?
- 11:00 a.m. Challenge the Experts Case #5**

Perioperative Neurology and Geriatric Topics

- 11:15 a.m. Perioperative Care of the Elderly Patient**
- How old is too old to consider surgery?
 - 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?
- 12:15 p.m. Challenge the Experts Case #6**

12:30 p.m. Question and Answer Session

12:45 p.m. Adjourn

SATURDAY, OCTOBER 26, 2019

6:30 a.m. Continental Breakfast

7:00 a.m. Breakfast with the Professor Case Discussions: Informal Q & A with Friday's 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 kidney disease?
- How do I manage patients with advanced kidney disease, at risk for requiring perioperative hemodialysis?
- What are the key considerations for patients on peritoneal dialysis?
- 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!**