

**An Overview of Perioperative Medicine 2015:
From Outpatient Preoperative Assessment to Inpatient Postoperative Care**

WEDNESDAY, OCTOBER 7, 2015

6:00 a.m. Continental Breakfast and Registration

7:30 a.m. Welcome and Introductions

7:40 a.m. Responsibilities and Controversies: Role of the Medical Consultant

Margaret Beliveau, M.D., Tad M. Mabry, M.D., David R. Danielson, M.D.

- What are roles of the medical consultant?
- What constitutes a successful consultation?
- What should a preoperative evaluation include?

8:00 a.m. Anesthesia 101 for the Non-Anesthesiologist

David R. Danielson, M.D.

- What are the basics of the anesthesia process?
- What do paralytic agents do and what are the physiologic effects of anesthesia?
- Do we still need to perform neck flexion and extension films for patients with RA or Down Syndrome?
- What evidence is there to guide the “infield” vs “outfield” decision?
- What are the current fasting guidelines?

8:30 a.m. Cardiac Risk Assessment: Using Guidelines to Direct Practice

Karen F. Mauck, M.D.

- How do I apply the new ACC/AHA guidelines to preoperative cardiac risk assessment?
- Should I use the Gupta or the RCRI cardiac risk calculator?

9:00 a.m. Clinical Short: Preoperative Stress Testing

Michael A. Mikhail, M.D.

- How do I decide which preoperative stress test to order?
- When is a treadmill ECG alone sufficient?

9:15 a.m. Question and Answer Session

Margaret Beliveau, M.D., David R. Danielson, M.D., Karen F. Mauck, M.D., and Michael A. Mikhail, M.D.

9:30 a.m. Refreshment Break

10:00 a.m. Cardiac Risk Reduction Strategies – Medical and Interventional

Howard H. Weitz, M.D.

- 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?
- When is a resting echocardiogram indicated prior to surgery?
- How long should a patient wait to have surgery after MI or revascularization?

- 10:45 a.m. Perioperative Medication Management: Prescription & Non-Prescription Medication**
Moderator: Karna K., M.D.
Panel: Geno J. Merli, M.D., Howard H. Weitz, M.D., Margaret Beliveau, M.D., and David R. Danielson, M.D.
- What issues need to be considered with perioperative medication management?
 - What are the drugs that need to be held for surgery?
 - What drugs need to be given before surgery?
 - What should I recommend to my patients regarding dietary supplements perioperatively?
- 11:30 a.m. Appropriate Use of Laboratory Testing in the Surgical Patient: A Minimalist Approach**
Alyssa Burkhart, M.D.
- What standard preoperative screening laboratory testing is indicated?
 - When are specific laboratory tests indicated preoperatively?
 - Which patients need a preoperative ECG?
 - Which patients need a preoperative CXR?
 - When should pregnancy testing be done preoperatively?
- 12:00 p.m. Question and Answer Session**
Howard H. Weitz, M.D., Karna K. Sundsted, M.D. and Alyssa Burkhart, M.D.
- 12:15 p.m. Lunch on your own**
- 2:15 p.m. Management of Non-CAD Heart Disease in Non-Cardiac Surgery**
Howard H. Weitz, M.D.
- How do I manage a patient with valvular heart disease perioperatively?
 - 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 AICDs in the perioperative period?
- 3:15 p.m. Preoperative Pulmonary Risk Stratification and Risk Reduction Strategies**
Margaret Beliveau, M.D.
- Which factors contribute to pulmonary risk in non-cardiac surgery?
 - How can I best estimate the risk of postoperative pulmonary complications—are there good risk calculators available?
 - What measures can be employed to help minimize postoperative pulmonary complications in at-risk patients?
 - When is pulmonary testing recommended preoperatively?
 - 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?
- 3:45 p.m. Management of Postoperative Pulmonary Complications**
Deanne T. Kashiwagi, M.D.
- What are the most common postoperative pulmonary complications?

- How do I minimize or treat pulmonary complications in the postoperative period?

4:15 p.m. Question and Answer Session

Howard H. Weitz, M.D., Margaret Beliveau, M.D. and Deanne T. Kashiwagi, M.D.

4:30p.m. Complete Evaluation Forms / Adjourn

THURSDAY, OCTOBER 8, 2015

6:30 a.m. Continental Breakfast

7:00 a.m. Breakfast With the Professor: Meet with Individual Faculty to Discuss Questions/ Cases

Margaret Beliveau, M.D. (Pulmonary and Medical Consultation)

David R. Danielson, M.D. (Anesthesiology)

Deanne T. Kashiwagi, M.D. (Perioperative Pulmonary Medicine)

Alyssa Burkhardt, M.D. (Preop Testing)

Karna K. Sundsted, M.D. (Periop Medication)

Howard H. Weitz, M.D. (Cardiology)

Michael A. Mikhail, M.D. and Karen F. Mauck, M.D. (Cardiac Stress Testing)

7:55 a.m. Announcements

8:00 a.m. Managing Postoperative Cardiac Complications

Howard H. Weitz, M.D.

- 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)?

8:45 a.m. Management of Documented or Suspected Obstructive Sleep Apnea in Patients Undergoing Non-Cardiac Surgery

Eric J. Olson, M.D.

- 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?
- Which patients at high risk need to be tested prior to surgery to decrease the risk of potential complications?
- Which patients at high risk 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?

9:30 a.m. Question and Answer Session
Howard H. Weitz, M.D. and Eric J. Olson, M.D.

9:45 a.m. Refreshment Break

**10:00 a.m. DVT/PE Prophylaxis in the Surgical Patient I:
The ACCP Guidelines and the Internist's Perspective**
Geno J. Merli, M.D.

- What are the patient- and surgery-related risk factors for perioperative DVT?
- 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 do I use the Caprini Score to determine DVT risk?

**10:45 a.m. DVT/PE Prophylaxis in the Surgical Patient II
The AAOS Guidelines and the Orthopedist's Perspective**
Tad M. Mabry, M.D.

- 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?

11:15 a.m. Clinical Short: Perioperative Management of Antiplatelet Agents
Howard H. Weitz, M.D.

- How do I manage patients with coronary artery disease who are taking antiplatelet agents during the surgical period?
- How do I manage patients with cerebrovascular disease who are taking antiplatelet agents?
- Do I manage aspirin therapy differently perioperatively based on whether it is taken for primary or secondary prevention?
- How do I determine which patients need to have antiplatelet therapy stopped versus those who need to have antiplatelet therapy continued in the perioperative period?

11:30 a.m. Clinical Short: Preoperative Bleeding Risk Assessment
Rajiv K. Pruthi, MBBS

- Which patients should have hemostasis assessment preoperatively?
- What testing should be performed?

11:45 a.m. Question and Answer
Geno J. Merli, M.D., Tad M. Mabry, M.D., Howard H. Weitz, M.D., Rajiv K. Pruthi, MBBS

12:00 p.m. Lunch on your own

- 2:00 p.m. Perioperative Management of Anticoagulants (Warfarin): To Bridge or Not to Bridge**
Paul R. Daniels, M.D.
- 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?
- 2:30 p.m. Perioperative Management of Target Specific Oral Anticoagulants**
Geno J. Merli, M.D.
- How long should I hold dabigatran, rivaroxaban or apixaban before 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?
- 3:00 p.m. Question and Answer**
Paul R. Daniels, M.D. and Geno J. Merli, M.D.
- 3:15 p.m. Common Hematology Issues in the Perioperative Period**
Rajiv K. Pruthi, MBBS
 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?
 - 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?
- 4:00 p.m. Perioperative Considerations in the Patient with Rheumatologic Disease**
Kevin G. Moder, M.D.
- What special issues do I need to consider for patients with rheumatologic disease who are undergoing surgery?
 - How should I manage antirheumatic drugs and biologic agents perioperatively?
 - How do I diagnose and manage acute crystalline arthritis in the surgical patient?
- 4:30 p.m. Question and Answer Session**
Kevin G. Moder, M.D. and Rajiv K. Pruthi MBBS
- 5:00 p.m. Complete Evaluation Forms / Adjourn**

6:30 a.m. Continental Breakfast

7:00 a.m. Breakfast With the Professor: Meet with Individual Faculty to Discuss Questions/ Cases

Paul R. Daniels, M.D. (Anticoagulation Bridging)

Geno J. Merli, M.D. (VTE Prophylaxis and Target Specific Anticoagulant)

Kevin G. Moder, M.D. (Rheumatology)

Eric J. Olson, M.D. (Sleep Apnea)

Howard H. Weitz, M.D. (Cardiology)

7:55 a.m. Announcements

8:00 a.m. Understanding the Perioperative Stress Response/ Fluid Management

John B. Bundrick, M.D.

- What is unique about fluid management perioperatively?
- Which is better-- liberal or restrictive fluid management?
- What is the physiologic effect of cytokine and catecholamine release in the perioperative period?

8:30 a.m. Managing the Diabetic Patient in the Perioperative Period

Vinaya Simha, MBBS, M.D.

- 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?

9:15 a.m. Perioperative Management of the Patient with Kidney Disease

Amy W. Williams, M.D.

- 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?

10:00 a.m. Perioperative Care of the Elderly Patient

Margaret Beliveau, M.D.

- How old is too old to consider surgery?
- What are the risk factors and preventive measures of 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 reinstated postoperatively?

10:30 a.m. Question and Answer Session

John B. Bundrick, M.D., Vinaya Simha, MBBS, M.D., Amy W. Williams, M.D., and Margaret Beliveau, M.D.

10:45 a.m. Refreshment Break

- 11:00 a.m. Perioperative Management of Endocrine Issues: Stress Dose Steroids, Adrenal Insufficiency, Thyroid Disease**
Vinaya Simha, MBBS, M.D.
- 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?

- 11:30 a.m. Managing Patients with Neurologic Disease in the Perioperative Period**
Andrea N. Leep Hunderfund, M.D.
- 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?

- 12:00 p.m. Management of Postoperative Gastrointestinal Complications**
Arya B. Mohabbat, M.D.
- 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?

- 12:30 p.m. Question and Answer Session**
Vinaya Simha, MBBS, M.D., Andrea N. Leep Hunderfund, M.D. and Arya B. Mohabbat, M.D.

- 12:45 p.m. Complete Evaluation Forms / Adjourn**

SATURDAY, OCTOBER 10, 2015

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

- 7:00 a.m. Meet the Professor Case Discussions: Informal Q & A with selected course faculty at breakfast**
Margaret Beliveau, M.D. (Geriatric)
John B. Bundrick, M.D. (Fluid Management)
Vinaya Simha, MBBS, M.D. (Endocrinology)
Andrea N. Leep Hunderfund, M.D. (Neurology)
Arya B. Mohabbat, M.D. (General Internal Medicine)
Amy W. Williams, M.D. (Nephrology)

- 7:55 a.m. Announcements**

- 8:00 a.m. Perioperative Substance Abuse, a Panel Discussion**
Karna K Sundsted, M.D., Susan M. Moeschler, M.D. and Charles P. Reznikoff, MD.
- How do I screen for substance abuse preoperatively?
 - What are the specific issues with common drugs of abuse such as methamphetamine, cocaine and alcohol?
 - How do I manage patients on Suboxone and methadone perioperatively?

- 8:45 a.m. Pain Management in the Perioperative Period**

Susan M. Moeschler, M.D.

- 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?
- How do I manage chronic pain patients who have uncontrolled postoperative pain?
- When should I consider adjunctive analgesic therapies to help with pain control?
- How should patients on multiple sedating medications postoperatively be monitored?

9:30 a.m. Break and Hotel Check Out

10:00 a.m. Perioperative Infectious Disease Issues

Mary J. Kasten, M.D.

- How do I approach the postoperative patient with fever?
- Which patients need antibiotic prophylaxis perioperatively and for how long?
- How are patients with penicillin allergy managed in the perioperative period?
- How do I manage common postoperative infectious disease issues?

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

William Sanchez, M.D.

- 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 is the appropriate timing for transplant referral prior to surgery?
- What are the common postoperative management challenges for patients with advanced liver disease?

11:00 a.m. Question and Answer Session

William Sanchez, M.D., Karna Sundsted, M.D., Susan M. Moeschler, M.D., and Mary J. Kasten, M.D. and Charles P. Reznikoff, MD.

11:15 a.m. Complete Evaluation Forms/Adjourn

11:30 a.m. Question Module: Test Your Perioperative Medicine Knowledge (*optional session*)

1:30 p.m. Adjourn