

An Overview of Perioperative Medicine 2021:
From Outpatient Preoperative Assessment to Inpatient Postoperative Care
Hotel Del Coronado, Coronado, California and LIVESTREAM
All times noted are Pacific Time (PT)
November 2 – 6, 2021

TUESDAY, NOVEMBER 2, 2021

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

Moderator: Margaret Beliveau, M.D.

Panel: Catriona M. Harrop, M.D., Eric Schwenk, M.D., FASA and Brandon J. Yuan, M.D.

- 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. Question and Answer Session

8:20 a.m. Anesthesia Alerts for the Non-Anesthesiologist

Eric Schwenk, M.D., FASA

- 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?

8:50 a.m. Question and Answer Session

Perioperative Cardiovascular Medicine Topics, Part 1

8:55 a.m. Cardiac Risk Assessment: Using Guidelines to Direct Practice

Karen F. Mauck, M.D.

- 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?
- How might the Canadian and EU Guidelines impact my practice?

9:40 a.m. Question and Answer Session

9:45 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?
- How long should patients wait to have surgery after MI or revascularization?

10:15 a.m. Question and Answer Session

10:20 a.m. Challenge the Experts Case #1
Moderator: Karna K. Sundsted, M.D.
Panel: Margaret Beliveau, M.D., Karen F. Mauck, M.D. Eric Schwenk, M.D., FASA and Howard H. Weitz, M.D.

10:35 a.m. Question and Answer Session

10:40 a.m. Refreshment Break

Perioperative Medication and Fluid Management Topics

10:55 a.m. Understanding Perioperative Fluid Management

John B. Bundrick, M.D.

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

11:25 a.m. Question and Answer Session

11:30 a.m. Perioperative Medication Management: Prescription & Non-Prescription Medication

Moderator: Richard E. Silbert, M.D.

Panel: Margaret Beliveau, M.D., John B. Bundrick, M.D. and Adam K. Jacob, M.D.

- What issues need to be considered with perioperative medication management?
- What are some drugs that need to be held for surgery?
- What should I recommend to my patients regarding dietary supplements perioperatively?
- What are the SPAQI perioperative medication consensus statements?

12:15 p.m. Question and Answer Session

12:20p.m. Adjourn

WEDNESDAY, NOVEMBER 3, 2021

6:00 a.m. Continental Breakfast

6:30 a.m. Morning Case Discussions: Informal Q & A with Tuesday's Course Faculty

Perioperative Pain Management and Substance Use Topics

7:30 a.m. Pain Management in the Perioperative Period – Insights from Anesthesia/Pain Medicine and Hospital Medicine

Eric Schwenk, M.D., FASA

- What are the key issues in patients on chronic opioids preoperatively?
- What are the common PCA doses for postoperative pain control?
- When should I consider multi-modal analgesia to help with pain control?

Catriona M. Harrop, M.D.

- What are the commonly used opioids in the postoperative setting and how do I choose?
- How should patients on multiple sedating medications postoperatively be monitored?
- What is the best strategy for prescribing opioids on hospital discharge?

8:15 a.m. Question and Answer Session

- 8:25 a.m. Managing the Patient with Perioperative Substance Use Disorders**
Charles P. Reznikoff, M.D.
- 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?
- 9:10 a.m. Question and Answer Session**
- 9:15 a.m. Challenge the Experts Case #2**
Moderator: Karen F. Mauck, M.D.
Panel: Catriona M. Harrop, M.D., Charles P. Reznikoff, M.D. and Eric Schwenk, M.D., FASA
- 9:30 a.m. Question and Answer Session**
- 9:35 a.m. Refreshment Break**
- Perioperative Potpourri**
- 9:50 a.m. Clinical Shorts**
- Preoperative Anemia and Iron Therapy**
Catriona M. Harrop, M.D.
- When should I consider perioperative iron therapy and how is it administered?
- Non-Cardiac Device Management**
Adam K. Jacob, M.D.
- How do I manage non-cardiac devices perioperatively, such as deep brain stimulators, pain pumps, acupressure devices, etc?
- PAME in the Era of Telehealth**
Geno J. Merli, M.D.
- Do all patients require face to face preanesthesia medical evaluation and how do I decide?
- Laparoscopic Surgery and Patient Positioning – Why it Matters**
Adam K. Jacob, M.D.
- What are the physiologic effects of laparoscopic surgery and patient positioning in the OR?
- Prehabilitation**
Margaret Beliveau, M.D.
- Does exercise prehabilitation have a role in some patients prior to surgery?
- 11:05 a.m. Perioperative Management of Hip Fractures: Internal Medicine and Orthopedic Surgery Perspectives**
Karna K. Sundsted, M.D. and Brandon J. Yuan, M.D.
- What are the areas of collaboration and controversy in the management of patients with hip fracture?
 - How long do we have for medical optimization of hip fracture patients?
 - What are some hip fracture basics that are helpful to the internist?
- 11:35 a.m. Question and Answer Session**

11:40 a.m. Perioperative Infectious Disease Issues

Mary J. Kasten, M.D.

- What is the best approach for preoperative COVID-19 testing?
- How do I manage a patient who is COVID-19 positive and requires urgent surgery?
- 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?
- Is there a role for the use of probiotics to prevent postoperative infections?

12:25 p.m. Question and Answer Session

12:30 p.m. Adjourn

THURSDAY, NOVEMBER 4, 2021

6:30 a.m. Continental Breakfast

7:00 a.m. Morning 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

Howard H. Weitz, M.D.

- 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. Question and Answer Session

8:50 a.m. Perioperative Cardiology Clinical Shorts

Cardiac Stress Tests

Karen F. Mauck, M.D.

- How do I choose a cardiac stress test?

Preoperative ECG and Echocardiogram

Brian M. Dougan, M.D.

- When are preoperative ECGs and echocardiograms indicated?

Myocardial Injury after Non-Cardiac Surgery (MINS)

Dennis W. Regan, M.D.

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

Preoperative Laboratory Testing

David Raslau, M.D., M.P.H.

- Should I order a preoperative troponin and what other preoperative laboratory testing is recommended?

9:50 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)?

10:35 a.m. Question and Answer Session

10:40 a.m. Refreshment Break

Perioperative Genomics and Rheumatology

10:55 a.m. Perioperative Genomics

Denise M. Dupras, M.D., Ph.D.

11:25 a.m. Question and Answer Session

11:30 a.m. Perioperative Rheumatology Considerations

Kevin G. Moder, M.D.

- How do I manage DMARDS and other rheumatologic medications in patients who require surgery?
- What are the perioperative risks associated with rheumatologic diseases?
- How do I diagnose and manage acute crystalline arthritis in the surgical patient?

12:00 p.m. Question and Answer Session

12:05 p.m. Lunch On Your Own

Perioperative Pulmonary Medicine and Geriatric Topics

1:45 p.m. Preoperative Pulmonary Risk Stratification and Risk Reduction Strategies

Sandeep R. Pagali, M.D.

- 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. Question and Answer Session

- 2:20 p.m. Management of Postoperative Pulmonary Complications**
Catriona M. Harrop, M.D.
- 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?
- 2:50 p.m. Question and Answer Session**
- 2:55 p.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 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?
- 3:25 p.m. Recognizing and Addressing Frailty**
Margaret Beliveau, M.D.
- How is the frailty index used to identify patients at risk of postoperative complications?
 - Are there preoperative management strategies to address frailty?
 - How should frailty be managed in the postoperative period to minimize risk?
- 3:55 p.m. Question and Answer Session**
- 4:05 p.m. Challenge the Experts Case #3**
Moderator: Howard H. Weitz, M.D.
Margaret Beliveau, M.D., Catriona M. Harrop, M.D. and Sandeep R. Pagali, M.D.
- 4:20 p.m. Question and Answer Session**
- 4:25 p.m. Break**
- 4:45 p.m. “Consult Guys” Presentation: The Myths of Perioperative Care**
 (CME credit will not be provided for this session)
Geno J. Merli, M.D. and Howard H. Weitz, M.D.
- 5:30 p.m. Attendee Reception**
- FRIDAY, NOVEMBER 5, 2021
- 6:30 a.m. Continental Breakfast**
- 7:00 a.m. Morning 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 Internist's Perspective

Geno J. Merli, M.D.

- 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. Question and Answer Session

8:35 a.m. DVT/PE Prophylaxis in the Surgical Patient II:

The AAOS Guidelines and the Orthopedist's Perspective

Brandon J. Yuan, 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?

9:05 a.m. Question and Answer Session

9:10 a.m. Perioperative Management of Direct Oral Anticoagulants

Geno J. Merli, M.D.

- 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?

9:40 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

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?

10:30 a.m. Question and Answer Session

- 10:35 a.m. Common Hematology Issues in the Perioperative Period**
Rajiv K. Pruthi, M.B.B.S.
- 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?
- 11:05 a.m. Question and Answer Session**
- 11:10 a.m. Challenge the Experts Case #4**
Moderator: Howard H. Weitz, M.D.
Paul R. Daniels, M.D., Geno J. Merli, M.D., Rajiv K. Pruthi, M.B.B.S. and Brandon J. Yuan, M.D.
- 11:25 a.m. Question and Answer Session**
- Perioperative Sleep Medicine and Neurology Topics**
- 11:30 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?
 - 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?
- 12:00 p.m. Question and Answer Session**
- 12:05 p.m. Managing Patients with Neurologic Disease in the Perioperative Period**
Andrea N. Leep Hunderfund, M.D., MHPE
- 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?
- 12:35 p.m. Question and Answer Session**
- 12:40 p.m. Adjourn**

SATURDAY, NOVEMBER 6, 2021

6:30 a.m. Continental Breakfast

7:00 a.m. Morning 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

Vinaya Simha, M.B.B.S., 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?

8:30 a.m. Question and Answer Session

8:35 a.m. Perioperative Management of the Patient with Kidney Disease

Andrea G. Kattah, M.D.

- 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?
- Which electrolyte abnormalities should delay surgery?
- Are there some key perioperative recommendations for patients who are on the kidney transplant list?

9:20 a.m. Question and Answer Session

9:25 a.m. Perioperative Management of Endocrine Issues: Stress Dose Steroids, Adrenal Insufficiency, Thyroid Disease

Vinaya Simha, M.B.B.S., M.D.

- What issues do I need to consider in patients with hypothyroidism or hyperthyroidism in the perioperative period?
- Which patients should have thyroid function testing preoperatively?
- 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?
- Do patients who receive dexamethasone for prevention of nausea and vomiting also need stress dose hydrocortisone as well?

9:55 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

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 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?

11:15 a.m. Question and Answer Session

11:20 a.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?

11:50 a.m. Question and Answer Session

11:55 a.m. Perioperative Nutrition Considerations

Ryan T. Hurt, M.D., Ph.D.

- 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?

12:25 p.m. Question and Answer Session

12:30 p.m. Adjourn!