

An Overview of Perioperative Medicine 2021:
From Outpatient Preoperative Assessment to Inpatient Postoperative Care
Hotel Del Coronado, Coronado, California and LIVESTREAM
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. 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?

Perioperative Cardiovascular Medicine Topics, Part 1

8:45 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?

9:30 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?

10:00 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.

10:15 a.m. Question and Answer Session

Margaret Beliveau, M.D., Karen F. Mauck, M.D., Eric Schwenk, M.D., FASA and Howard H. Weitz, M.D.

10:30 a.m. Refreshment Break

Perioperative Medication and Fluid Management Topics

10:45 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?

11:15 a.m. Perioperative Medication Management: Prescription & Non-Prescription Medication

Moderator: Richard E. Silbert, M.D.

Panel: Margaret Beliveau, M.D., Michael A. Mikhail, 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?

12:00 p.m. Question and Answer Session

John B. Bundrick, M.D. and Richard E. Silbert, M.D.

12:15 p.m. Adjourn

WEDNESDAY, NOVEMBER 3, 2021

6:30 a.m. Breakfast with the Professor 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. 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?

9:00 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

9:15 a.m. Question and Answer Session
Catriona M. Harrop, M.D., Charles P. Reznikoff, M.D. and Eric Schwenk, M.D., FASA

9:30 a.m. Refreshment Break

Perioperative Potpourri

9:45 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

Dennis (Mike) M. Bierle, M.D.

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

11:00 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?

11:30 a.m. Perioperative Genomics

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

12:00 p.m. Question and Answer Session

Dennis (Mike) M. Bierle, M.D., Denise M. Dupras, M.D., Ph.D., Catriona M. Harrop, M.D., Adam K. Jacob, M.D., Geno J. Merli, M.D., Karna K. Sundsted, M.D., and Brandon J. Yuan, M.D.

12:15 p.m. Adjourn

THURSDAY, NOVEMBER 4, 2021

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

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. Perioperative Cardiology Clinical Shorts

Cardiac stress tests

Dennis (Mike) M. Bierle, 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?

9:45 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)?

10:30 a.m. Question and Answer Session

Dennis (Mike) M. Bierle, M.D., Brian M. Dougan, M.D., David Raslau, M.D., M.P.H., Dennis W. Regan, M.D., and Howard H. Weitz, M.D.

10:45 a.m. Refreshment Break

Perioperative Infectious Disease and Rheumatology

11:00 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?

11:45 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?

12:15 p.m. **Question and Answer Session**

Mary J. Kasten, M.D. and Kevin G. Moder, M.D.

12:30 p.m. **Lunch**

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. **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?

2:45 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 reinstated postoperatively?

3:15 p.m. **Recognizing and Addressing Frailty**

Donna M. Miller, 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?

3:45 p.m. Challenge the Experts Case #3

Moderator: Howard H. Weitz, M.D.

Margaret Beliveau, M.D., Catriona M. Harrop, M.D., Donna M. Miller, M.D. and Sandeep R. Pagali, M.D.

4:00 p.m. Question and Answer Session

Margaret Beliveau, M.D., Catriona M. Harrop, M.D. and Sandeep R. Pagali, M.D. and Donna M. Miller, M.D.

4:15 p.m. Break

4:30 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.

5:15 p.m. Attendee Reception

FRIDAY, NOVEMBER 5, 2020

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 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. 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?

9:00 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?

9:30 a.m. Question and Answer Session

Geno J. Merli, M.D. and Brandon J. Yuan, M.D.

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. 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?

11:00 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.

Perioperative Sleep Medicine and Neurology Topics

11:15 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?

11:45 a.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?

12:15 p.m. Question and Answer Session

Paul R. Daniels, M.D., Andrea N. Leep Hunderfund, M.D., MHPE, Eric J. Olson, M.D. and Rajiv K. Pruthi, M.B.B.S.

12:30 p.m. Adjourn

SATURDAY, NOVEMBER 6, 2020

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

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. 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?

9:15 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?

9:45 a.m. Question and Answer Session

Andrea G. Kattah, M.D. and Vinaya Simha, M.B.B.S., M.D.

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. 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?

11:45 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?

12:15 p.m. Question and Answer Session

Ryan T. Hurt, M.D., Ph.D., Arya B. Mohabbat, M.D. and William Sanchez, M.D.

12:30 p.m. Adjourn!