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Amir K. Jaffer

Preoperative Testing and Medication Management	573
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Judy M. Woolger

The preoperative evaluation of the geriatric patient is an important time to make a series of assessments. Careful attention is paid to cardiac and pulmonary readiness for the physiologic stress of surgery. It is also a time to focus on the patient's mental capacities and social support system, and nutritional state. Because so many patients take multiple medications and supplements, the preoperative assessment is also a time to carefully review exactly what it being taken. It is a time to assess for drug interactions, and also to adjust medications to prepare the patient for the stress of surgery.

Perioperative Cardiac Evaluation: Assessment, Risk, Reduction, and Complication Management	585
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Karen F. Mauck, Efren C.Manjarrez, and Steven L. Cohn

Perioperative cardiac complications are among the most feared outcomes after surgery. Using evidence-based guidelines and expert opinion, physicians can perform a risk assessment and decide whether further cardiac testing, medical therapy, or coronary intervention is necessary to optimize the patient's medical condition prior to surgery. This article reviews the major concepts and recommendations from the ACC guidelines for preoperative cardiac evaluation and perioperative management to reduce risk. Medical management of the major postoperative cardiac complications is also discussed.

Preoperative Pulmonary Update	607
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Gerald W. Smetana and Michelle V. Conde

Postoperative pulmonary complications are an important source of surgical morbidity. In this paper, the authors review recent studies that shed light on emerging risk factors, a multifactorial index for respiratory failure, and the value of specific risk reduction strategies. Novel risk factors include advanced age, congestive heart failure, pulmonary hypertension, and obstructive sleep apnea. Important risk reduction strategies include postoperative lung expansion maneuvers, the selective use of nasogastric tubes, epidural analgesia, and inspiratory muscle training.

- Prevention of Venous Thromboembolism After Surgery** 625
Amir K. Jaffer and Daniel J. Brotman
- Venous thromboembolism, including deep vein thrombosis and pulmonary embolism, is the third leading cause of cardiovascular death after myocardial infarction and stroke in the United States. Recommendations regarding the type and duration of prophylaxis for the various conditions are summarized herein.
- Perioperative Anemia in the Elderly** 641
Ajay Kumar and Jeffrey L. Carson
- Anemia is characterized by less than the normal number of red blood cells (RBCs) (as a result of underproduction, increased loss, or destruction) or decreased quantity of hemoglobin (Hgb) in the blood, thereby reducing the blood's oxygen-carrying capacity.
- Perioperative Care of the Geriatric Patient with Diabetes or Hyperglycemia** 649
Greg Maynard, Cheryl W. O'Malley, and Susan R. Kirsh
- The incidence of diabetes in the geriatric population is increasing and the resulting co-morbidities have led to corresponding increases in hospital admissions and surgeries. The weight of the evidence and national guidelines should dissuade us from allowing uncontrolled hyperglycemia in the geriatric perioperative population, but the glycemic target should be modified upwards based on the individual patient characteristics, and in environments that do not have an established track record of reaching more aggressive targets safely. Insulin is the most effective and flexible regimen to achieve inpatient glycemic control, whether by infusion or by subcutaneous basal bolus regimens. Strategies for safe and effective dosing and adjustment of insulin regimens, and methods to avoid hypoglycemia in the perioperative period are outlined. Finally, discharge planning should take into consideration a patient's HbA1c, preoperative glycemic control, inpatient glycemic regimen and control, financial and physical limitations, social support, co-morbid medical conditions, episodes of hypoglycemia, and overall prognosis to create an individualized safe and effective medication regimen for optimal glycemic control at home.
- Evaluation and Management of the Elderly Patient at Risk for Postoperative Delirium** 667
Anita S. Bagri, Alex Rico, and Jorge G. Ruiz
- Geriatric patients are at a high risk for the development of postoperative delirium. By recognizing predisposing and precipitating risk factors, preventive measures can be undertaken to reduce this risk. Accurate and timely diagnosis is essential, and we offer therapeutic strategies to help reduce the high morbidity and mortality of this important condition.

Perioperative Management of the Elderly Undergoing Eye Surgery 687

Steven Gayer and Jessica Zuleta

Eye procedures are considered to be low risk; however, many ophthalmic surgery patients are elderly and are a unique vulnerable group with a myriad of concomitant health issues that put them at greater risk for perioperative medical complications. A trend to shift operative venues from hospitals to ambulatory facilities and more recently to specialty eye-care surgery centers limits the resources available to manage major, and even minor, medical issues that arise on the day of surgery. The role of the internist in the preoperative evaluation and optimization of medical issues before surgery and availability for perioperative consultation and intercession is increasingly essential.

Medical Management of Hip Fracture 701

Moises Auron-Gomez and Franklin Michota

The United States population at the greatest risk for hip fracture, those aged 65 years and older, is steadily increasing in size. Today, the incidence of hip fracture is approximately 250,000 per year and it is expected to double in the next 30 years. Hip fracture patients are comorbid at baseline, and there are complications inherent to hip fractures that can occur in almost a predictable fashion. Overall, one in four hip fracture patients will die within one year of injury. Medical comanagement of hip fracture patients offers the best chance for successful outcome.

Postoperative Renal Failure 721

Saira Noor and Ali Usmani

Acute renal failure (ARF) or acute kidney injury (AKI) is a common problem occurring in about 1% to 5% of all hospitalized patients. It leads to poor quality of life and increased length of stay (LOS), cost of care, morbidity, and mortality. The survival rate for ARF has not drastically changed over the past 4 decades because of the aging population and presence of multiple comorbid conditions. About 200 patients per million population develop severe ARF each year. Approximately one-third of these patients require ICU care. Recent studies have shown that even milder forms of renal dysfunction are associated with increased LOS and mortality.

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