

UTHSC Internal Medicine Consult Syllabus 2016

Rotation Description:

Three week long rotation, completed by a PGY-2-4. The service is run by a faculty member in the division of internal medicine. Residents participate in consults at the VA-Memphis and Regional One Hospital. There is no call during this rotation. The resident will work with an attending to see inpatients admitted to surgical specialty services, psychiatry, and obstetrics/gynecology. Residents will learn to co-manage patients.

All residents are to attend their continuity clinic, house staff noon conference and department conferences. All residents should follow the Internal Medicine Syllabus below with recommended and required reading and quizzes.

Goal:

- To become knowledgeable about issues in pre-operative medical consultation, become proficient in evaluating and treating patients in the peri-operative period.
- The learn the factors that influence the effectiveness of medical consultation and to apply this knowledge during the consultation rotation
- Resident should become proficient in the following areas:
 - Pre-op coronary risk stratification for non-cardiac surgery
 - Pre-op coronary management for non-cardiac surgery
 - Peri-op cardiac non-coronary management for non-cardiac surgery
 - Peri-operative HTN and DM management
 - Peri-operative thromboembolic prophylaxis and management
 - Pre-op medication management
 - Pre-op (cost effective) lab testing
 - Peri-operative endocarditis prophylaxis
 - General peri-operative medical issues- nutrition, endocrine

Teaching Methods:

- Daily rounds – at least bedside three times a week.
- Required and optional reading – required by asterisk
- Teaching sessions – conducted 3-4 days per week for one hour at a time
 - Residents will be responsible for teaching during these sessions based on handouts provided (MedEd cases)
 - The teaching sessions will be divided as follows:
 - Week 1: General Approach to Consults, Perioperative management of cardiac cases, and VTE prophylaxis/anticoagulation, pregnancy
 - Week 2: Antimicrobial prophylaxis, Perioperative management of endocrine cases (DM and HTN) and liver disease
 - Week 3: Perioperative management of anemia and bleeding disorders, perioperative management of neurological cases, Perioperative management of pulmonary disease

-Residents will be required to discuss 10 consult related topics with the attending during the rotation (form must be signed off).

Evaluation:

Evaluations completed by consult attendings in a group at the end of the rotation using a standard evaluation form provided by the residency program

Reading Topics (Required reading marked with a STAR)

General

1. Balk EM et al. Benefits and harms of routine preoperative testing-comparative effectiveness. AHRQ. 2014.
- *2. Bilimoria KY et al. Development and evaluation of the universal ACS NSQIP surgical risk calculator: a decision aid and informed consent tool for patients and surgeons. J Am Coll Surg 2013; 217: 833-842.

Cardiovascular

1. Devereaux PJ et al. Association between postoperative troponin levels and thirty day mortality among patients undergoing noncardiac surgery. JAMA 2012; 307:2295-2304.
2. Livhits M et al. Risk of surgery following recent myocardial infarction. Ann Surg. 2011; 253:857-864.
3. Bouri S et al. Meta-analysis of secure randomised controlled trials of B-blockage to prevent perioperative death in non-cardiac surgery. Heart 2014; 100:456-464.
- *4. Devereaux PJ, Sessler DI. Cardiac complications in patients undergoing major noncardiac surgery. NEJM 2015;373:2258-2269.
5. Devereaux PJ et al. Effects of extended release metoprolol succinate in patients undergoing non-cardiac surgery (POISE trial): a randomised controlled trial. Lancet 2008; 371: 1839-1847.
6. Bedeir K et al. Infective endocarditis: perioperative management and surgical principles. J Thor CDV Surg 2014; 147:1133-1141.
7. Devereaux PJ et al. Characteristics and short-term prognosis of perioperative myocardial infarction in patients undergoing noncardiac surgery. Ann Intern Med 2011;154:523-528.
- *8. Wilson W et al. Prevention of infective endocarditis. Circulation 2007; 116: 1736-1754.
9. Devereaux PJ et al. Aspirin in patients undergoing noncardiac surgery. NEJM 2014;370:1494-1503.

10. Vashnava P, Eagle KA. The yin and yang of perioperative medicine. *NEJM* 2014;370: 1554-1555.
11. Kruger T et al. Acute aortic dissection-type A. *Br J Surg.* 2012;99:1331-1344.
- *12. Fleisher L et al. 2014 ACC/AHA guidelines on perioperative CDV evaluation and management of patients undergoing non-cardiac surgery. Executive summary. *Circulation* 2014;130:2215-2245.
13. Fleisher L et al. 2014 ACC/AHA guidelines on perioperative CDV evaluation and management of patients undergoing non-cardiac surgery. *JACC.* 2014; 64:e77-e137.
14. Frendyl G et al. 2014 AATS guidelines for prevention and management of perioperative atrial fibrillation and flutter for thoracic surgical procedures. *J Thor CDV Surg* 2014;148:772-791.
15. Wijesundera DN et al. Perioperative beta blockage in noncardiac surgery: a systematic review for the 2014 ACC/AHA guideline. *JACC* 2014;64:2406-2425.
16. Samarendra P, Mangione M. Aortic stenosis and perioperative risk with noncardiac surgery. *JACC* 2015;65:295-302.
- *17. Gerstein NS et al. Perioperative aspirin management after POISE-2: some answers, but questions remain. *Anesth Analg* 2015; 120:570-575.
18. Patel AY et al. Cardiac risk of noncardiac surgery. *JACC* 2015;66:2140-2148.

Gastroenterology/Hepatology

1. Nohra E, Bochicchio GV. Management of the gastrointestinal tract and nutrition in the geriatric surgical patient. *SCNA* 2015; 95: 85-101.
- *2. Torgersen Z, Balters M. Perioperative nutrition. *SCNA* 2015;95:255-267.

Endocrine

1. Salem M et al. Perioperative glucocorticoid coverage. *Ann Surg* 1994;219:416-425.
2. Umpierrez G et al. Randomized study of basal bolus insulin therapy in the inpatient management of patients with Type 2 diabetes undergoing general surgery. *Diab Care* 2011;34:256-261.
- *3. Diabetes care in the hospital. *Diabetes Care* 2016; 36(Suppl 1): S99-S104.
4. Evans CH et al. Optimal glucose management in the perioperative period. *SCNA* 2015;95:337-354.
5. Stewart MK, Terhune KP. Management of pregnant patients undergoing general surgical procedures. *SCNA* 2015; 95:429-442.

Nephrology

- *1. Borthwick E, Ferguson A. Perioperative acute kidney injury: risk factors, recognition, management, and outcome. *BMJ* 2010; 341:85-91.
- 2. Bell S et al. Risk of postoperative acute kidney injury in patients undergoing orthopedic surgery. *BMJ* 2015; 351:1-9.

Pulmonary

- *1. Smetana GW et al. Risk factors for postoperative pulmonary complications-an update of the literature. *Hosp Pract* 2014; 42:126-131.
- 2. Taylor A et al. Prevention of postoperative pulmonary complications. *SCNA* 2015;95:237-254.
- *3. Practice guidelines for the perioperative management of patients with obstructive sleep apnea. *Anest* 2014;120:268-286.
- *4. Brunelli A et al. Physiological evaluation of the patient with lung cancer being considered for resectional surgery. *Chest* 2013;143 (5 Suppl):e166S -e190S.
- 5. Gupta H et al. Development and validation of a risk calculator predicting postoperative respiratory failure. *Chest* 2011;140:1207-1215.
- 6. Nagappa M et al. Effects of CPAP on postoperative outcomes in obstructive sleep apnea patients undergoing surgery.: a systematic review and meta-analysis. *Anesth Analg* 2015;120:1013-1023.
- 7. Stierer T, Collop N. Perioperative assessment and management for sleep apnea in ambulatory surgical patients. *Chest* 2015;148:559-565.

DVT Prevention

- *1. Pannucci C et al. A validated risk model to predict 90-day VTE events in postsurgical patients. *Chest* 2014;145:567-573.
- *2. Yngve F et al. Prevention of VTE in orthopedic surgical patients. *Chest* 2012;141 (2 Suppl): e278S-e325S.
- *3. Gould MK et al. Prevention of VTE in nonorthopedic surgical patients. *Chest* 2012; 141 (2 Suppl): e227S-e277S.

Hematology

- *1. Baron TH et al. Management of antithrombotic therapy in patients undergoing invasive procedures. *NEJM* 2013;368:2113-2124.

- *2. Douketis J et al. Perioperative bridging anticoagulation in patients with atrial fibrillation. *NEJM* 2015;373:823-833.
- *3. Practice guidelines for perioperative blood management. *Anesthesiology* 2015;122:241-275.
4. Douglas W et al. Transfusion and management of surgical patients with hematological disorders. *SCNA* 2015;95:367-377.
5. Carson JL et al. Liberal versus restrictive blood transfusion strategy: three year survival and cause of death results from the FOCUS randomised trial. *Lancet* 2015;385:1183-1189.
6. Murphy GV et al. Liberal or restrictive transfusion after cardiac surgery. *NEJM* 2015;372:977-1008.
- *7. Van Veen J, Makris M. Management of perioperative antithrombotic therapy. *Anaesthesia* 2015;70 (Suppl1):58-67.
- *8. Klein K et al. AI algorithmic approach to coagulation testing. *Dis Mon* 2012;58:431-439.
9. Van PY, Schreiber MA. Hematological issues in the geriatric surgery patient. *SCNA* 2015;95:129-138.

Infectious Diseases

- *1. Najjar P, Smink D. Prophylactic antibiotics and prevention of surgical site infection. *SCNA* 2015;95:269-283.

Neurology/Neurosurgery

- *1. Munster AB et al. Temporal trends in safety of carotid endarterectomy in asymptomatic patients. *Neurology* 2015;85:365-372.
2. Katus L, Shtilbans M. Perioperative management of patients with Parkinson's disease. *Amer J Med* 2014;127:275-280.
3. Wu AS et al. A prospective randomized trial of perioperative seizure prophylaxis in patients with intraparenchymal brain tumors. *J Neurosurg* 2013;118:873-883.

Psychiatry

1. Postoperative delirium in older adults: best practice statement from the American Geriatrics Society. *J Am Coll Surg* 2015;220:136-148.
2. American Geriatrics Society. Clinical practice guidelines for postoperative delirium in older adults. 2014: 1-41.

Surgical Procedure and Disease Specific Articles

1. Salminen P et al. Antibiotic therapy versus appendectomy for treatment of uncomplicated acute appendicitis. *JAMA* 2015;313:2340-2348.
2. Skou ST et al. A randomized controlled trial of total knee replacement. *NEJM* 2015;373:1597-1606.
3. Banca J, Hogan K. Malignant hyperthermia, coexisting disorders and enzymopathies: risks and management options. *Anesth Analg* 2009;109:1049-1053.
4. Schlitzkus L et al. Perioperative management of elderly patients. *SCNA* 2015;95:391-415.
- *5. Bovich-Supola J et al. Postoperative pain control. *SCNA* 2015;95:301-318.
6. Hung WW et al. Hip fracture management. *JAMA* 2012;307:2185-2194.
- *7. Tinubu J, Scalea T. Management of fractures in a geriatric surgical patient. *SCNA* 2015;95:115-128.