

**General Surgery Residency Program  
Competency -Based Goals and Objectives  
Harper D Rotation- Minimally Invasive Surgery**

**Academic year: 2008-2009**

**Site Location: Harper University Hospital, 3990 John R Street, Detroit, MI. 48201**

**Division Chief: John Webber, M.D.**

**Other Faculty Preceptors: Matthew Weiner, M.D; Scott Laker, M.D.; M. Mounir Gazayerli, M.D.  
Ali Elhorr, M.D.**

**Assigned Residents: PGY 1, 2, and 5**

**Length of Rotation: PGY 1 Residents = 4 weeks; PGY 2-5 Residents = 6-8 weeks**

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**MEDICAL KNOWLEDGE**

**GOAL:** The resident will achieve detailed knowledge of the performance of both advanced and basic laparoscopic surgery both for non-bariatric and bariatric procedures.

**PGY 1 Residents:**

- Describe the physiologic changes associated with pneumoperitoneum.
- Describe the appropriate use of antibiotics in laparoscopic procedures.
- Gain a general understanding of indications for laparoscopic procedures versus contraindication for laparoscopic surgery, i.e. do not perform Nissen fundoplication in a patient s/p Roux-en-Y gastric bypass.
- Describe the differences in gastric bypass, Lap-Band and sleeve gastrectomy.
- Understand the differences in complications between gastric bypass, Lap-Band and sleeve gastrectomy.
- Be able to efficiently operate a 0 degree laparoscopic camera.

**PGY 2 Residents:**

- Understand complications of bariatric procedures and how to test and diagnose these problems.
- Pass the FLS module.
- Pass a didactic session at the end of the rotation on intracorporeal needle holding, setting and suturing with extracorporeal knot tying.
- Describe laparoscopic procedures and applications; be proficient in multidisciplinary care of the oncologic and bariatric patient.
- Understand peritoneal dialysis and the laparoscopic placement of peritoneal dialysis catheters.
- Be able to efficiently operate a 30 degree laparoscopic camera.
- Be able to diagnose and correct image acquisition problems for laparoscopic camera.

**PGY 5 Residents:**

- Describe, evaluate and understand the indications for various laparoscopic procedures and be able to defend choice of procedure.
- Recognize limitations of laparoscopy and when to convert a laparoscopic procedure to an open procedure.
- Recognize that conversion to an open procedure is not a complication.
- Be able to demonstrate efficiency in setting up and trouble shooting the laparoscopic tower and demonstrate what different controls on the tower are used for.
- Be able to enter into the abdominal cavity using an optical trocar.
- Be able to perform intracorporeal needle holding, setting and suturing with extracorporeal knot tying.

## **PATIENT CARE**

**GOAL:** The resident will provide patient care that is compassionate, appropriate and effective for the treatment of the surgical and bariatric patient.

### **PGY 1 Residents:**

- Perform comprehensive history and physical examination of the abdomen, especially acute abdomen. Inform and explain to patient and family the results of tests done in the hospital including laboratory tests and x-rays.
- Master the technique of basic suturing and tying. Master the use of computerized information services including ability to plot trends in lab values over time.
- Master the sterile technique in the operating room and on the floor while maintaining universal precautions.
- Demonstrate and apply pain management procedures including V.A.S., and methods of postoperative pain control.
- Demonstrate the ability to benchmark cases: lipoma excision and open inguinal hernia repair.

### **PGY 2 Residents:**

- Master the technique of endoscopy and basic laparoscopy, i.e. Laparoscopic cholecystectomy and appendectomy.
- Assess surgical considerations independently particularly in postoperative laparoscopic patients.
- Apply patient care practices as it relates to critically ill patients in the ICU.
- Master hernia repair, both ventral and inguinal using open techniques.
- Laparoscopic cholecystectomy and appendectomy.
- Describe and understand available mesh for laparoscopic and open inguinal and ventral hernia repair.

### **PGY 5 Residents:**

- Demonstrate mastery of basic laparoscopic suturing in Lap-Band procedures and laparoscopic Roux-en-Y gastric bypass.
- Scrub and recognize laparoscopic anatomy as it pertains to laparoscopic colectomies.
- Demonstrate mastery of laparoscopic foregut surgery as it relates to Nissen fundoplication.
- Take and pass the FLS module.
- Laparoscopic cholecystectomy and appendectomy.
- Understand the trend in general surgery is toward laparoscopic surgery.
- Sign-up for and demonstrate an account on WEBSURG to review laparoscopic cases prior to scrubbing them.

## **INTERPERSONAL AND COMMUNICATION SKILLS**

**GOAL:** The resident will demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and professional associates.

### **PGY 1 and 2 Residents:**

- Demonstrate to attending staff the ability to take problem-oriented history in outpatient clinic and ethically manage patient confidential information and medical record according to HIPPA standards.
- Coordinate and facilitate the interaction between resident team and medical students
- Demonstrate the ability to teach basic surgical techniques

### **PGY 5 Residents:**

- Lead team on rounds on a daily basis
- Be adept at the timely and efficient deployment of the resident team to maximize learning opportunities
- Demonstrate ability to assess medical students performance and give feedback for improved learning
- Teach more complex procedures and assessment to other residents

## **PROFESSIONALISM**

**GOAL:** The resident will demonstrate a commitment to carrying out professional responsibilities adherence to organizational and ethical principles, and demonstrate sensitivity to a diverse patient population.

### **PGY 1 and 2 Residents:**

- Demonstrate appropriate dress and decorum while on duty; conversations in public places to be free of patient information. Respond to criticism and correction with calm and attentive demeanor
- Demonstrate ability to listen to patient complaints and offer compassionate solutions
- Display leadership to medical students and younger residents in being sensitive to patient confidential needs

### **PGY 5 Residents**

- Demonstrate ethical concern for the particular needs of all patients-including sensitivity to religious concerns, racial differences and care of the poor
- Demonstrate leadership by acting as a role model to other residents
- Apply ethical principles, respect patient confidentiality

## **PRACTICE BASED LEARNING AND IMPROVEMENT**

**GOAL:** The resident will investigate and evaluate his or her own patient care practices appraise and assimilate scientific evidence and improve patient care practices

### **PGY 1 and 2 Residents:**

- Be adept at reading and critically analyze standard surgical textbooks.
- Use Pub-Med, Med-Line and other online search engines to find
- Apply information from medical literature in the care of patients; this includes ability to assess statistical validity of published studies.

### **PGY 5 Residents:**

- Conduct case presentations at mortality/morbidity conferences, which includes review of surgical literature and the integration of that information into specific patient cases
- Recognize department morbidities and mortalities as a member of Department of Surgery Mortality and Morbidity Committee
- Be adept at current literature to assess proper dispensation of care

## **SYSTEMS-BASED PRACTICE**

**GOAL:** The resident will demonstrate an awareness of and responsiveness to the larger context and system of healthcare and be able to call on system resources to provide care that is of optimal value.

### **PGY 1 and 2 Residents:**

- Recognize the differences between PPO's HMO's and standard medical insurance and the different requirements for authorizations needed for hospital admissions and operations. Select appropriate medical procedures based on cost-effectiveness and risk to patient
- Recognize and understand the relative costs of surgical procedures
- Demonstrate proficiency at using ancillary services to facilitate transferring the patient in a cost saving way through the in-and-outpatient system

### **PGY 5 Residents:**

- Recognize and be familiar with different medical insurances
- Understand the importance in using the ICD-9 Codes/CPT Codes
- Demonstrate and apply proper and accurate reporting of surgical procedures in the operative record
- Describe ethical coding and billing for surgical procedures