

**General Surgery Residency  
Loma Linda University Medical Center**

**LLUMC Pediatric Surgery Goals and Objectives**

**PGY 3**

**Goals:**

Residents will learn the unique aspects of medical practice, diagnosis, decision-making, comprehensive care and communication with neonates, children, adolescents, their families and other child-oriented specialties. They will also be attentive to systems, practices, policies and procedures that affect children in a unique way. The best interests of children will be at the forefront of decisions and medical care and residents will gain experience in effective critical thinking that promotes the best possible outcomes for pediatric patients.

**Objectives:**

**Medical Knowledge**

Describe the embryological development of the peritoneal cavity and the position of the abdominal viscera.

Diagram the anatomy of the abdomen including its viscera and anatomic spaces.

Describe the anatomy of the omentum and its role in responding to inflammatory processes.

Describe the treatment alternatives for the patient with an acute abdomen according to the specific etiology.

Describe the anatomy, embryological development, clinical presentation and timing of treatment of inguinal hernias, umbilical hernia and hydrocele.

Compare and contrast the anatomy, pathophysiology, associated syndromes and timing of treatment of omphalocele and gastroschisis.

Describe the pathophysiology, types and treatment of anorectal malformations.

Describe the presentation, types, workup and treatment for esophageal atresia and tracheo-esophageal fistulae.

Be able to describe the presentation and pathophysiology of pyloric stenosis including diagnostic modalities, fluid and electrolyte management and timing as well as surgical options for treatment.

List a differential diagnosis and diagnostic workup for bowel obstruction in the neonatal period.

Describe the pathophysiology, diagnosis and treatment for Hirschprung's disease.

Have an understanding of the pathophysiology of GERD in the pediatric population, the diagnostic modalities including pH probe and UGI series and treatment principles.

List a differential diagnosis of abdominal masses in the pediatric population.

Describe the pathophysiology, diagnostic modality and treatment options for intussusception.

Have an understanding of the embryology, pathophysiology, and types of diaphragmatic hernias and their treatment.

List the five types of choledocal cysts and treatment.

Describe the pathophysiology, presentation and diagnosis of biliary atresia as well as the timing of surgery.

Outline the basic techniques of evaluation and resuscitation of pediatric trauma patients using the Advanced Trauma Life Support (ATLS) protocol.

Outline the different treatment options for hepatic, splenic, pancreatic and duodenal injuries.

Outline the treatment options for thoracic injuries.

### **Patient Care**

Establish basic proficiency in providing pre-operative and post-operative care (writes appropriate pre-op and post-op orders for floor patients, handles nursing calls appropriately, and manages most routine post-operative care with minimal intervention by supervisor).

Take an appropriate history to evaluate patients with general surgical issues to include:

- a. A complete history of present illness
- b. Presence of any co-morbidities
- c. A review of social and family history impacting the present problem
- d. A complete review of systems

Demonstrate an increasing level of skill in the physical examination of the general surgery patient with a special emphasis in recognition of the surgical abdomen.

Develop a proficiency in evaluation and interpretation of the different diagnostic modalities including: X-Rays, ultrasounds, CT scans, Contrast studies and MRIs.

Discuss treatment options, risks and potential complications of patients with pediatric surgical issues.

Assist in the performance of general surgical and laparoscopic procedures.

Demonstrate skill in basic surgical techniques, including:

- Knot tying
- Exposure and retraction
- Knowledge of instrumentation
- Incisions
- Closure of incisions
- Handling of graft material including mesh
- Establishing pneumoperitoneum
- Handling of laparoscopic instruments
- Handling of the laparoscopic camera

Evaluate and institute management of abdominal wound problems.

Coordinate pre and post-surgical operative care for patients in the Pediatric Surgery rotation.

Assist in closure of abdominal incisions and exhibit competency in suture technique.

Be able to apply and remove all types of dressings.

Make and close a variety of incisions and tie knots using sterile technique.

Develop awareness and participate in the evaluation and treatment of non-accidental trauma victims.

Demonstrate knowledge of steps to be taken to have a patient ready for surgery including pre-op workup and medical clearance.

### **Professionalism**

The resident should be receptive to feedback on performance, attentive to ethical issues and be involved in end-of-life discussions and decisions.

Understand the importance of honesty in the doctor-patient relationship and other medical interactions.

Treat each patient, regardless of social or other circumstances, with the same degree of respect you would afford to your own family members.

Learn how to participate in discussions and become an effective part of rounds, attending staff conference, etc.

Complete all assigned patient care tasks for which you are responsible or provide complete sign out to the on-call resident.

Maintain a presentable appearance that sets the standard for the hospital that includes but is not limited to adequate hygiene and appropriate dress. Scrubs should be worn only when operating or while on call.

Assist with families of critically injured/ill patients and guidance of families towards or through difficult decisions.

Demonstrate mentoring and positive role-modeling skills.

Take the leading role in directing the weekly educational conferences involving the medical students and junior residents. This includes choosing appropriate peer-reviewed articles and texts and arranging for films and presentations to be ready.

Provide an appropriate orientation and guide all medical students and junior residents as to their roles and responsibilities during the rotation.

### **Systems-Based Practice**

Understand, review, and contribute to the refinement of clinical pathways

Understand the cost implications of medical decision-making

Partner with health care management to facilitate resource efficient utilization of the hospital's resources.

Describe in general terms the benefits of clinical pathway implementation

Develop a cost-effective attitude toward patient management.

Develop an appreciation for the benefits of a multi-disciplinary approach to management of critically ill surgical patients.

Comply with the Health Insurance Portability and Accountability Act of 1996 (HIPAA) regulations regarding patient privacy and confidentiality.

Demonstrate knowledge in steps and conduct during major surgical procedures.

Have clear indications and know when it is appropriate to perform a surgical procedure.

Have an understanding of when it is not appropriate to operate.

Demonstrate knowledge of steps to be taken to have a patient ready for surgery including pre-op workup and medical clearance.

### **Practice-Based Learning & Improvement**

Demonstrate the ability to:

- Evaluate published literature in critically acclaimed journals and texts
- Apply clinical trials data to patient management
- Participate in academic and clinical discussions

Accept responsibility for all dimensions of routine patient management on the wards

Apply knowledge of scientific data and best practices to the care of the surgical patient

Facilitate learning of medical students and physician assistant students on the team.

Use the LLUMC library and databases of on-line resources to obtain up to date information and review recent advances in the care of the surgical patient.

Demonstrate a consistent pattern of responsible patient care and application of new knowledge to patient management.

Demonstrate a command and facility with on line educational tools.

### **Interpersonal & Communication Skills**

Work as effective team members

Cultivate a culture of mutual respect with members of nursing and support staff

Develop patterns of frequent and accurate communication with team members and attending staff

Gain an appreciation for both verbal and non verbal communication from patients and staff

Demonstrate consistent respectful interactions with members of nursing and support staff

Demonstrate consistent, accurate and timely communication with members of the surgical team

Demonstrate sensitivity and thoughtfulness to patients concerns, and anxieties.

The resident will demonstrate the ability to provide and request appropriate consultation from other medical specialists.