

LLUMC – Pediatric Surgery PGY 2

Goals:

Loma Linda University Medical Center will provide a learning environment for common and important pediatric surgical conditions. Surgical basic science, including fluids and electrolytes, wound healing, and nutrition, will be emphasized. Clinically, residents will assess surgical pathology pre-operatively, develop clinical judgment on managing these issues, and learn operative skills to address the problem. Careful postoperative care and follow up will be emphasized.

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 Hirschsprung'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 choledochal 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 complete history of present illness
 - Presence of any co-morbidities
 - A review of social and family history impacting the present problem
 - A complete review of systems
- Demonstrate an increasing level of skill in the physical examination of the pediatric 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 and awareness and participate in the evaluation and treatment of non-accidental trauma victims.

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; this 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.
- Provide an appropriate orientation and guide all medical students as to their roles and responsibilities during the rotation.
- Provide an appropriate orientation to other PGY 2s that are about to rotate through the pediatric surgery service.

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.
- Complete the personal learning project as outlined in the PBLI curriculum

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.

Assessment:

- Patient Care and technical skills will be assessed by the attending surgeon on a daily basis.
- During the formal evaluation at the end of the rotation

Educational Conferences:

Conference	Date and Time	Location
M&M / Grand Rounds	Wednesday - 7:00 am	LLUMC
Basic Science lecture	Wednesday – 6:00 am	LLUMC
Pediatric Surgery Conf	Tuesday – 11:00 pm	LLUMC
Pediatric Surgery Pathology Conference b	Tuesday - Noon	LLUMC
Pediatric Tumor Board	Wednesday – Noon	LLUMC
Pediatric Radiology Conference	Thursday – 11:00	LLUMC
Skills Lab / Journal Club	Thursday – 7:00 am	LLUMC