Pediatric Hospital Medicine Core Competencies

Section One: Common Clinical Diagnoses and Conditions

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ACUTE ABDOMINAL PAIN AND THE ACUTE ABDOMEN

INTRODUCTION

Acute abdominal pain is a common presenting symptom of children and adolescents and prompts the consideration of an extensive differential diagnosis. Although it is frequently due to common, self-limited medical conditions related to the abdomen such as gastroenteritis, it may also be a signal of systemic illness or referred from problems elsewhere in the body. Acute abdominal pain may or may not be accompanied by signs and symptoms of an acute abdomen such as loss of bowel sounds or evidence of obstruction. Identifying children with a true medical or surgical emergency is critical. Children with peritonitis and other surgical conditions need prompt evaluation by a surgeon with pediatric expertise. Early diagnosis and treatment reduces morbidity, mortality, and length of hospital stay. Pediatric hospitalists frequently encounter children with acute abdominal pain in a variety of clinical settings and should assist in the timely and effective evaluation and management either alone or in conjunction with a surgeon.

KNOWLEDGE

Pediatric hospitalists should be able to:

- Recognize features of the medical history and physical examination that prompt specific diagnostic evaluation.
- Describe the differential diagnosis of acute abdominal pain as well the acute abdomen for children of varying chronological and developmental ages.
- List gender-specific etiologies of acute abdominal pain, such as testicular torsion and ovarian cyst rupture.
- Identify the role congenital anomalies may play in the child with an acute abdomen.
- Discuss the principles of stabilization of the child with an acute abdomen, such as volume resuscitation, antibiotics, and bowel decompression.
- List conditions that may mimic the acute abdomen, such as lower lobe pneumonia and diabetic ketoacidosis.
- State the importance of, and indications for, early surgical consultation in the child with an acute abdomen.
- Compare and contrast benefits versus limitations of various commonly performed studies such as acute abdominal series, sonography, computed tomography, nuclear medicine scans, and magnetic resonance imaging. State the benefits of and barriers to use of contrast enhancement for these studies.
- Provide indications for hospital admission and cite the reasons for admission to various locations in the hospital system, such as a short-stay unit, surgical or medical ward, step-down intensive care unit, or intensive care unit.
- Cite reasons for patient transfer to a referral center in cases requiring pediatric-specific services not available at the local facility.
- Identify specific evaluation and treatment needs for technology dependent children who present with an acute abdomen, including children with feeding and drainage tubes (gastrostomy, jejunostomy, ileosotomy, and others), long term vascular access devices (ports, Hickman catheters, and others), shunts (ventricular, other), ventilator dependence, and other implanted devices.
- Summarize the approach toward pain control in patients presenting with acute abdominal pain, attending to medication choice, delivery method, and impact on exam re-assessments.

SKILLS

Pediatric hospitalists should be able to:

- Obtain an accurate history and perform a thorough physical examination.
- Formulate a targeted differential diagnosis based on elements from the history and physical examination, prior to ordering studies.
- Identify the child with an acute abdomen.
- Identify and manage the child with concomitant hypovolemia or sepsis.
- Direct an appropriate and cost-effective evaluation to identify the cause of the abdominal pain or the acute abdomen.
- Access radiology services efficiently, for both performance and interpretation of studies.
- Order and correctly interpret commonly performed basic diagnostic imaging studies and laboratory studies.
- Consult surgeons effectively and efficiently when indicated.
- Identify the child requiring emergent surgical consultation.

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- Provide pre- and post-operative general pediatric care for the child requiring surgery, as appropriate, including pain management.
- Coordinate care with the primary care provider and arrange an appropriate transition plan for hospital discharge.

ATTITUDES

Pediatric hospitalists should be able to:

- Assume responsibility for care of patients as the primary attending or in collaboration with the surgical team.
- Communicate effectively with patients, the family/caregiver, and healthcare providers regarding findings and care plans.

SYSTEMS ORGANIZATION AND IMPROVEMENT

In order to improve efficiency and quality within their organizations, pediatric hospitalists should:

- Educate healthcare providers, trainees, the family/caregiver regarding the signs and symptoms of the acute abdomen to encourage early detection and prompt evaluation.
- Lead, coordinate or participate in a multidisciplinary team to provide optimal care for children with acute abdominal pain with and without acute abdomen.
- Incorporate knowledge of outcomes research and cost management strategies into the evaluation and treatment of patients with an acute abdomen.
- Lead, coordinate or participate in institutional efforts to improve the expediency of diagnostic laboratory and radiographic studies, availability of specialty care, and other resources for patients with acute abdominal pain and acute abdomen.