

SECTION 1. COMMON CLINICAL DIAGNOSES AND CONDITIONS

1.01 ACUTE ABDOMINAL PAIN AND ACUTE ABDOMEN

Introduction

Acute abdominal pain is a common presenting symptom of children and adolescents and prompts the consideration of an extensive differential diagnosis. Pediatric hospitalists frequently encounter children with acute abdominal pain. Acute abdominal pain may be due to common and self-limited medical conditions such as gastroenteritis or constipation, but it may also herald life threatening surgical conditions or systemic illness. The differential diagnosis of acute abdominal pain is broad, making a careful, skilled, and thorough history and physical examination essential in the evaluation of children presenting with this symptom. Identifying children with a true medical or surgical emergency is critical. Early diagnosis and treatment reduce morbidity, mortality, and length of hospital stay.

Knowledge

Pediatric hospitalists should be able to:

- Describe features of the medical history and physical examination that prompt specific and expedient diagnostic evaluation.
- Compare and contrast the differential diagnoses of acute abdominal pain and acute abdomen for children of varying ages.
- Describe and differentiate the clinical presentation consistent with intestinal obstruction from other causes of acute abdominal pain such as appendicitis, acute cholecystitis, and others.
- Differentiate etiologies of acute abdominal pain related to biological sex, such as testicular torsion, ovarian cyst rupture, ectopic pregnancy, and others.
- Discuss the presenting symptoms associated with abdominal emergencies (such as mid-gut volvulus and intussusception), including bilious emesis, bloody diarrhea, and severe pain.
- List the appropriate radiological studies for evaluation of various abdominal emergencies.
- Identify how the presentation of abdominal emergencies may differ in neonates and infants by including nonspecific symptoms, such as vomiting or lethargy.
- List conditions that may mimic the acute abdomen, including lower lobe pneumonia, diabetic ketoacidosis, and others.
- Discuss the benefits, risks, and limitations of commonly performed diagnostic studies, including abdominal radiography, ultrasonography, computed tomography, magnetic

resonance imaging, and nuclear medicine scans, noting the benefits of and barriers to use of contrast enhancement for these studies.

- Describe the laboratory tests indicated to evaluate acute abdominal pain and acute abdomen.
- Discuss the importance of and indications for early surgical consultation in the child with an acute abdomen.
- Describe the principles of stabilization of the child with an acute abdomen, including volume resuscitation, antibiotics, and bowel decompression.
- Discuss the approach toward pain management in patients presenting with acute abdominal pain, including the impact of medication on serial exams.
- Describe indications for patient placement in various locations in the hospital system, such as an observation unit, surgical or medical ward, step-down, or intensive care unit.
- Discuss indications for patient transfer to a referral center, such as need for pediatric-specific services not available at the local facility.

Skills

Pediatric hospitalists should be able to:

- Obtain an accurate and thorough history to identify symptoms, triggers, and clinical course of acute abdominal pain and acute abdomen.
- Perform a physical exam to elicit signs of abdominal pain, differentiate findings of acute abdomen, and assess illness severity.
- Formulate a targeted differential diagnosis based on elements from the history and physical examination.
- Identify the child with an acute abdomen who requires emergent surgical consultation.
- Identify and manage the child with concomitant hypovolemia or sepsis requiring immediate medical stabilization.
- Direct an appropriate and cost-effective evaluation for acute abdominal pain and acute abdomen.
- Create and implement a treatment plan for non-surgical causes of abdominal pain.
- Order and correctly interpret basic diagnostic imaging and laboratory studies.
- Consult surgeons and other subspecialists effectively and efficiently when indicated.
- Provide pre- and post-operative general pediatric care for the child requiring surgery, including pain management, according to local practice parameters.
- Coordinate care with the primary care provider and subspecialists to arrange an appropriate transition plan for hospital discharge.

Attitudes

Pediatric hospitalists should be able to:

- Exemplify collaborative practice with subspecialists, includ-

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ing surgical teams and primary care providers, to ensure efficient care within the hospital setting and coordinated longitudinal care.

- Realize responsibility for promoting effective communication with patients, family/caregivers, 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:

- Lead, coordinate, or participate in education of healthcare providers, trainees, the family/caregivers 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.

- 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 children with acute abdominal pain and acute abdomen.
- Lead, coordinate, or participate in institutional efforts to develop surgical consultation or co-management models, clearly defining roles to ensure timely, high quality, and comprehensive care for pediatric patients requiring surgical care.

References

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