COMMON CLINICAL DIAGNOSES AND CONDITIONS

GASTROENTERITIS

INTRODUCTION

Gastroenteritis is one of the most common diseases of childhood, accounting for thousands of hospital admissions each year. Admission to the hospital can be prevented in most cases with appropriate use of oral rehydration. Although uncommon in developed countries, morbidity and mortality can occur, especially among hospitalized infants with severe dehydration, electrolyte abnormalities, sepsis or malnutrition. Misdiagnosis of gastroenteritis may occur, particularly when vomiting is the predominant symptom, which can lead to inappropriate treatment for potentially life threatening conditions. Pediatric hospitalists routinely encounter patients with gastroenteritis and should provide immediate medical care in an efficient and effective manner.

KNOWLEDGE

Pediatric hospitalists should be able to:

- Review the elements of the history which are pertinent to obtain, such as travel, immunization status, water source, daycare attendance, food sources and methods of preparation and others.
- Describe the elements of the physical examination that aid in supporting or refuting the diagnosis.
- Cite critical medical (such as diabetic ketoacidosis, CNS infection or injury, malabsorption, toxic ingestion, inborn errors of metabolism, and others) and surgical (such as bowel obstruction, testicular/ovarian torsion, and others) differential diagnoses to consider and describe the key history and physical examination findings of each, attending to differences by age.
- Compare and contrast the differential diagnoses of isolated emesis versus emesis with diarrhea.
- Describe the differences in approach toward diagnosis and treatment for patients with underlying comorbidities or receiving treatments which may affect potential pathogens.
- List the common etiologies for gastroenteritis depending upon geographic location and age.
- Summarize the literature on gastroenteritis epidemiology, immunizations, and global health impact.
- Describe the epidemiologic factors associated with different pathogens, such as close contact with other symptomatic individuals, intake of contaminated food or water, case clustering, and recent travel to an endemic area.
- Compare and contrast clinical findings which are more suggestive of viral, bacterial, and parasitic gastroenteritis.
- Discuss the role of infection control in the hospital, as well as public health reporting mandates.
- List the indications for diagnostic laboratory tests, including stool, blood, and urine studies, attending to age groups, predictive value of tests, and cost-effectiveness.
- Describe the role of oral rehydration solutions in the treatment of dehydration related to gastroenteritis.
- List the indications for hospital admission, including the need for intravenous fluids, correction of fluid, electrolyte and acid base disturbances, close clinical monitoring and/or further diagnostic evaluation.

SKILLS

Pediatric hospitalists should be able to:

- Correctly diagnose gastroenteritis by efficiently performing an accurate history and physical examination, determining if key features of the disease are present.
- Recognize and correctly manage dehydration, fluid, electrolyte and acid base derangements.
- Recognize and assess patients for complications of gastroenteritis such as sepsis, significant ileus, and hemolytic uremic syndrome.
- Identify findings of and appropriately evaluate patients for alternative conditions.
- Identify and appropriately treat patients at risk for unusual pathogens.
- Direct a cost-effective and evidence-based evaluation and treatment plan, especially with regard to laboratory studies, antibiotics, and oral or intravenous fluid resuscitation.
- Consistently adhere to infection control practices.
- Efficiently render care by creating a discharge plan which can be expediently activated when appropriate.

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ATTITUDES

Pediatric hospitalists should be able to:

- Educate the family/caregiver on infection control practices to decrease pathogen transmission.
- Ensure coordination of care for diagnostic tests and treatment between subspecialists.
- Realize the importance of educating the family/caregiver on the natural course of disease to manage expectations for improvement.
- Role model and advocate for strict adherence to infection control practices.
- Communicate effectively with patients, the family/caregiver, and healthcare providers regarding findings, care plans, and anticipated health needs after discharge.

SYSTEMS ORGANIZATION AND IMPROVEMENT

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

- Lead, coordinate or participate in the development and implementation of cost-effective, safe, evidence-based care pathways to standardize the evaluation and management for hospitalized children with gastroenteritis.
- Work with hospital administration to create and sustain a process to follow up on laboratory tests pending at discharge.
- Collaborate with institutional infection control practitioners to improve processes to prevent nosocomial infection related to gastroenteritis.
- Work with hospital and community leaders to assure consistent public health reporting of appropriate infections and response to trends.