1.10 CONSTIPATION

Introduction

Constipation is a common pediatric problem, accounting for 3% of all outpatient visits and up to 0.5% of all pediatric hospital admissions. While constipation affects many children, only a very small minority have an organic cause for their symptoms. The great majority have functional constipation, also termed idiopathic constipation or functional fecal retention. Pediatric hospitalists frequently care for children admitted for fecal impaction or encounter constipation as a comorbidity during other admissions. Therefore, pediatric hospitalists must be knowledgeable about the differential diagnosis of organic and functional causes of constipation. In addition, they must be adept at the implementation of evidence-based approaches for relieving stool burden and providing education for patients and caregivers.

Knowledge

Pediatric hospitalists should be able to:

- Discuss the self-perpetuating nature of constipation, the physiologic changes related to colonic volume and defecation signaling, and the pathophysiology of encopresis and soiling.
- Discuss the elements of the history which are pertinent; including family history, stooling history, age at which first stool was passed, current stooling pattern, diet history, prior test results, previous treatments and response, and related behaviors such as withholding, stooling avoidance, and others.
- Describe the elements of the physical exam that would help confirm or contradict the diagnosis of constipation.
- Describe common factors that might lead to functional or non-organic constipation, including cognitive disabilities, toilet/school bathroom phobia, poor toilet training experiences, sexual abuse, low fiber diet, dehydration, underfeeding, and inattentiveness to internal stooling signals.
- Compare and contrast key historical and physical exam findings for uncommon but important medical causes of constipation (such as hypothyroidism, hypercalcemia, hypokalemia, cystic fibrosis, diabetes, cerebral palsy, Hirschsprung disease, and others), including the key features that would distinguish them from a diagnosis of functional constipation.
- Discuss the pathophysiology of the development of constipation in the post-operative setting, including preventative strategies and medical management.
- Identify common medications that can lead to constipation, including opioids, antacids, anticholinergics, antidepressants, and sympathomimetics.
- Describe common inpatient medical conditions that can lead to secondary constipation, such as inactivity or immobility, poor oral intake, sedation, ileus from other gastrointestinal disorders, and others.
- Discuss the inpatient treatment options for acute stool impaction and symptomatic constipation, as well as options for outpatient management strategies (such as therapies available, side effects, timing of periodic monitoring, duration of therapy, and others).
- Describe the admission criteria for fecal impaction and circumstances that should trigger consultation with a gastroenterologist or pediatric surgeon.

Skills

Pediatric hospitalists should be able to:

- Diagnose and differentiate functional and organic constipation by performing a careful history and exam.
- Identify signs and symptoms of developing stool retention as a secondary problem during hospitalization and effectively respond with an appropriate treatment plan.
- Select appropriate diagnostic studies to evaluate functional or organic causes of constipation when suspected and correctly interpret results.
- Prescribe and manage disimpaction and/or whole bowel clean out regimens, accounting for potential complications of therapy (such as fluid and electrolyte shifts and others), designation of an appropriate endpoint, and discharge criteria.
- Engage consultants (such as registered dieticians, gastroenterology, psychology, and others) efficiently when indicated.
- Create a discharge maintenance therapy regimen and follow-up plan, including education of the patient and the family/caregivers.

Attitudes

Pediatric hospitalists should be able to:

- Realize responsibility and long-term importance of promoting communication with patients and caregivers about the causes of constipation and the goals and duration of therapy.
- Reflect on the psychological implications inherent in the diagnosis of constipation including the impact of parental frustration, toileting expectations, frequent soiling, and the non-volitional nature of the disorder.
- Acknowledge and provide support for patients and caregivers on common pitfalls in the treatment of chronic constipation.

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 evidence-based and cost-effective clinical guidelines to improve the quality of care for inpatient management of constipation and whole bowel clean out.
- Collaborate with subspecialty consultants, including surgeons and gastroenterologists, to improve the care and management of complex patients with constipation.
- Coordinate the care of professional staff (including primary care providers and subspecialists) to ensure communication about, enhance adherence to, and provide education to patients and the family/caregivers regarding ongoing treatment regimens.

Reference

1. Evaluation and treatment of functional constipation in infants and children: Evidence-based recommendations from ESPGHAN-NASPGHAN. *J Pediatr Gastro Nutr*. 2014;58(2):258-274. https://doi.org/10.1097/MPG.0000000000000266.