Guideline: Pediatric constipation inpatient management.

Updated: 2/22/2022

Clinical algorithm:

Patient has history of anorectal malformation, Hirschsprung's disease, or recent abdominal history?

Yes → STOP. These patient populations are excluded from this pathway. Discuss next steps with pediatric general surgery.

No →

Patient has failed outpatient management including outpatient medical disimpaction

Yes → Attempt outpatient management first.

No → Admit to Pediatric Hospitalist Medicine Service

Patient has large impaction at distal colon (as determined by physical exam or KUB1) and/or significant abdominal distension.

Yes →

Give sodium phosphate enema2

Improvement in signs and symptoms?

Yes →

Discuss manual disimpaction under anesthesia with general surgery

• If agreement on disimpaction, hold golytely until after disimpaction.
• If agreement that disimpaction not needed, may proceed to golytely regimen.

No →

Polyethylene glycol (PEG—orally or NG)

• Start at 5ml/kg/hour.
• Increase by 10ml/kg/hour every 2 hours
• Maximum rate: 25ml/kg/hour, not to exceed 400ml/hour.
• Hold for one hour if emesis or abdominal distension.
• Ensure adequate hydration in addition to PEG (either PO or IV)
• Diet: clears as tolerated.

No →

Patient develops vital sign instability or concerning abdominal exam during PEG drip?

Yes →

Stop drip
Consider KUB to rule out free air

No → Continue drip until effluent is transparent (flecks of material ok).

Continue to post-cleanout phase (next page)
Notes

1. Neither imaging nor digital rectal exam are indicated for routine evaluation of constipation. KUB can help assess need for rectal treatment, but abdominal exam can achieve the same purpose.

2. Dosing: 33 mL enema for children 2 to <5 years old, 66ml for 5-12 years old, 133mL for children ≥12 years old. Can repeat once in 12-24 hours.

Clinical guideline summary

CLINICAL GUIDELINE NAME: Chronic constipation 2 years – 18 years of age.

PATIENT POPULATION AND DIAGNOSIS: Children 2 years – 18 years of age with functional constipation/obstipation failing outpatient management and in need of colon cleanout. This guideline does not apply to infants or children < 2 years of age. This guideline does not apply to children with history of Hirschprung’s disease, anorectal malformation, or recent abdominal surgery.

APPLICABLE TO: Helen DeVos Children’s Hospital;
BRIEF DESCRIPTION: Colonic cleanout in the context of chronic constipation is for most patients straightforward. However, there are some situations where “anterograde” cleanout with polyethylene glycol should be preceded with rectal treatments including enemas or manual disimpaction. Furthermore, the need for further workup may be missed when a patient is admitted for a cleanout. This CPG promotes identification of patients for whom anterograde cleanout is contraindicated prior to other interventions and promotes assessment of the diagnostic workup that has been completed as well as additional diagnostic workup that may be indicated. It also provides standardization of initial polyethylene glycol rates, rate of advancement, goal rates, and response to complications.

OVERSIGHT TEAM LEADER(S): Eric Kort, Ryan Cox, Emily Durkin

OWNING EXPERT IMPROVEMENT TEAM (EIT): Inpatient Clinical Practice EIT

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Children’s Health CPC

CPC APPROVAL DATE: February 2022

OTHER TEAM(S) IMPACTED: Pediatric Gastroenterology, Pediatric General Surgery,

IMPLEMENTATION DATE: February 2022

LAST REVISED: 1/18/2022

FOR MORE INFORMATION, CONTACT: Eric Kort

Clinical pathways clinical approach

TREATMENT AND MANAGEMENT:

Please refer to flowchart above.

References:

Sood M. Chronic functional constipation and fecal incontinence in infants, children, and adolescents: Treatment UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on August 25, 2021.)