**Pediatric Constipation Diagnosis and Treatment**

**Features concerning for constipation:**
- Decreased stool frequency
- Painful defecation of hard stools

**Functional Constipation has at least TWO:**
- 2 or less stools per week
- Stool withholding
- Painful or hard bowel movements
- Large-diameter stools that may obstruct the toilet
- Large fecal mass in the rectum on exam
- At least 1 episode/week of fecal incontinence

**Red Flags Present**
- Acute surgical abdomen
- Hirschsprung disease
- Neurologic disease
- Other systemic conditions

**See red flag info on next page**

**No Red Flags**
- Lower concern for underlying process
- Functional constipation is likely
- **Abdominal XRs are not helpful**

**Fecal Impaction Present**
- **(Stool in rectum on digital exam)**
- Treat according to **Rectal Table**

- **<6 months old:**
  - Glycerin suppository

- **>6 months old:**
  - No Fecal Impaction

**Rectal Table**

<table>
<thead>
<tr>
<th>Age</th>
<th>Medication</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year old</td>
<td>Glycerin suppository</td>
<td>0.5 to 1 suppository</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>Normal saline enema</td>
<td>10 mL/kg (Max 120 mL)</td>
</tr>
</tbody>
</table>
| > 2 years    | Fleet enema (Sodium phosphate) | 2 to 12 years:  
  - Pediatric prep (67.5 mL)  
  - Older than 12 years:  
    - Adult prep (133 mL)  
|              | Mineral oil enema   | 2 to 11 years:  
  - 30 to 60 mL  
  - Older than 11 years:  
    - 60 to 133 mL |

**No effective within 1 hour:**
- Admission
- Consider further testing

**Effective**
- Treatment according to **Rectal Table**

**Discharge Medication Table**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Line</td>
<td></td>
</tr>
</tbody>
</table>
| Miralax (PEG 3350)  | 10 to 20 kg: 0.5 capful (8.5 g) daily  
  > 20 kg: 1 capful (17 g) once daily  
  - Continue for at least 2 months  
  - Titrate to effect  |
| Lactulose           | 1 to 2 g/kg/day once/twice daily |
| 2nd Line            |                            |
| Senne              | 2 to 6 years old:  
  - 1 tab = 8.6 mg  
  - 5 mL = 8.8 mg  
  - Should not be continued  
  - Milk of magnesia  
  - 2 to 5 years old:  
    - 0.4 to 1.2 g/day once/twice daily  
    - 6 to 11 years old:  
      - 1.2 to 2.4 g/day once/twice daily  
      - 12 to 18 years old:  
        - 2.4 to 4.8 g/day once/twice daily |
| Bisacodyl           | 3 to 12 years old:  
  - 5 mg daily  
  - Older than 12 years old:  
    - 5 to 15 mg daily |

**Additional Information:**
- It may take up to 3 to 4 months to resolve
- Meds should be used for at least 1 month after symptoms resolve
- Provide a calendar to the family to track stools and titrate Miralax
- Give the family the Constipation Care Package from GI Kids.org
- Show the family “The Poo in You” video on YouTube

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Publication Date: September 2019  
Review Date: 
### Differential Diagnoses and Red Flags for Decreased Stool Frequency

<table>
<thead>
<tr>
<th>Functional Constipation</th>
<th>Hirschsprung Disease</th>
<th>Systemic Conditions</th>
<th>Small Bowel Obstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Passed meconium within the first 48 hours</td>
<td>• Did not pass meconium within the first 48 hours</td>
<td>• Hypothyroidism or Celiac</td>
<td>• Bilious emesis</td>
</tr>
<tr>
<td>• Normal bowel habits as an infant</td>
<td>• Abnormal bowel habits as an infant</td>
<td>• Delayed growth</td>
<td>• Severe abdominal distension</td>
</tr>
<tr>
<td>• Symptoms began between 1 and 3 years of age</td>
<td>• Symptoms began as an infant</td>
<td>• Failure to thrive</td>
<td>• Abdominal tenderness</td>
</tr>
<tr>
<td>• Stool withholding</td>
<td>• Family history of Hirschsprung disease</td>
<td>• Weight loss</td>
<td>• Previous abdominal surgery</td>
</tr>
<tr>
<td>• Stool pattern typically every 2 to 4 days</td>
<td></td>
<td>• Crohn’s disease</td>
<td></td>
</tr>
<tr>
<td>• Large diameter stools that may obstruct the toilet</td>
<td></td>
<td>• Rectal bleeding</td>
<td></td>
</tr>
<tr>
<td>• Pain or straining with defeation</td>
<td></td>
<td>• Weight loss</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Joint pain</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Neurologic disorder</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lower extremity weakness</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sacral dimple/tuft of hair</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Absent cremasteric reflex</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Congenital anomalies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Child abuse</td>
<td></td>
</tr>
</tbody>
</table>

#### Rectal Exam:

- Large dilated rectal vault
- Hard palpable fecal mass in rectum
- May have rectal fissure

#### Rectal Exam:

- Empty rectal vault
- Explosive expulsion of stool after digital exam

#### Rectal Exam:

- Hypothyroidism or Celiac
- No specific findings
- Crohn’s disease
- Perianal fistula
- Stool positive for blood
- Neurologic disorder
- Absent anal wink
- Decreased anal tone
- Congenital anomalies
- Stenosis of rectum
- Anteriorly-placed rectum
- Child abuse
- Extreme fear during exam

#### Rectal Exam:

- No specific findings

#### Inpatient Cleanout Table

<table>
<thead>
<tr>
<th>Dose</th>
<th>Rate (NG)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miralax (PEG)</td>
<td>4 grams/kg (Max 238g)</td>
<td>25 to 40 mL/kg/hr mix each packet (17g) with 8 ounces of fluid given until stool is clear</td>
</tr>
<tr>
<td>Golytely</td>
<td>4 L = 236g of PEG</td>
<td>25 to 40 mL/kg/hr over 4 hours given until stool is clear may need to check BMP if repeated</td>
</tr>
</tbody>
</table>

**All patients >20 kg should have a stimulant medication (Bisacodyl or Senna) 4 hours prior to PO or NG cleanout**

<table>
<thead>
<tr>
<th>Weight</th>
<th>Bisacodyl</th>
<th>Senna</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 kg</td>
<td>5mg</td>
<td>17.2mg or 10mL</td>
</tr>
<tr>
<td>21 to 30 kg</td>
<td>10mg</td>
<td>25.8mg or 15mL</td>
</tr>
<tr>
<td>&gt; 31 kg</td>
<td>15mg</td>
<td>51.6mg or 15mL</td>
</tr>
</tbody>
</table>

#### Exclusion Criteria (known diagnoses):

- Hirschsprung disease
- Previous abdominal or spinal tumors
- Short gut syndrome
- Gut dysmotility syndromes
- Cystic fibrosis
- Undergoing chemotherapy/radiation
- Spina bifida
- History of abdominal surgery
- Congenital heart disease

**References:**


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**Review Date:**