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EC PAEDIATRICS
Guest Editorial

The Sprint of Constipation Management Marathon

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Received: May 19, 2020; **Published:** June 09, 2020

Introduction

Constipation is a contentious issue in children and up to date, no thorough management is completely durable for the cure. Being constipated means your child bowel movements are tough or happen less often than normal. Almost everyone goes through it at some point. Although it's not usually serious, the child will feel much better when his/her body is back on track. The normal length of time between bowel movements varies widely from child to child. Some children have them three times a day. Others have them just a few times a week. Going longer than 3 or more days without one, though, is usually too long. After 3 days, the poop gets harder and more difficult to pass. Its prevalence is about 30% and 95% of children are functional constipation and 5% is organic constipation.

Definitions

Constipation: Refers generally to bowel movements that are infrequent or hard to pass and stool is often hard and dry.

Functional constipation: Is a functional bowel disorder in which symptoms of difficult, infrequent, or incomplete defecation predominate.

Functional constipation according to ROME IV criteria diagnosed if two of the following criteria for one month are present:

1. ≤ 2 defecations per week
2. One episode of fecal incontinence per week
3. Painful or hard bowel movement
4. History of retentive posturing, large fecal mass in the rectum, and large stool diameter.

Figure 1: *Pictures of the retentive posturing.*

Retentive posturing: It is an attempt of withholding to avoid painful defecation by pelvic floor muscle contraction to preclude the passage of the stool. This characteristic posture called banana posture.

Soiling: Or encopresis or fecal incontinence it is the repeated passing of the stool involuntary into clothing. Typically, it happens when impacted fecal matter collects in colon and rectum so liquid stool leaks around the retained stool and staining underwear. it means non-retentive fecal constipation.

Refractory constipation: It means constipation without response to optimal, adequate and conventional therapy of effective laxatives for at least three months.

Obstipation: It is the absence of passage of both faces and flatus and denotes often and underlying organic obstruction

Slow transit constipation: With abnormal enteric nerves leads to reduced motility of large intestine with slow stool passage with constipation and uncontrolled soiling.

Constipation clinical presentations:

- The most common symptom is abdominal pain
- Painful large bowel movement and poor appetite
- Urinary tract infection and soiling.

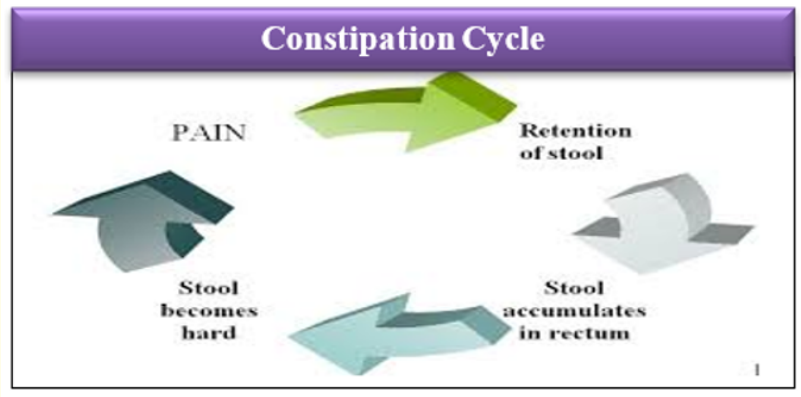

Figure 2

Modified Bristol Stool Chart

It is very important for the evaluation of constipation and its idea relay on with stool accumulation.

In the colon and the rectum, it becomes harder and causes a closed circuit of constipation.

Type 1 and type 2 is constipation stool, type 3 is the normal stool and type 4, 5 is the Diarrhea stool.

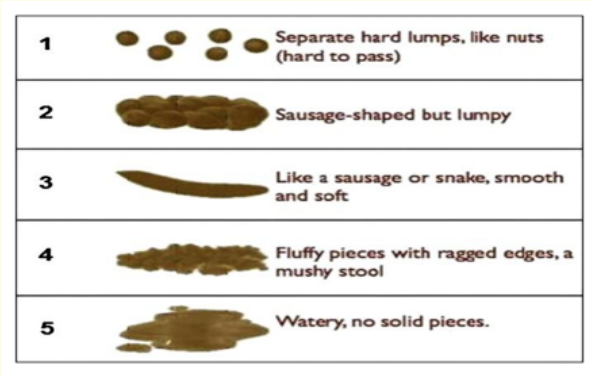

Figure 3

Etiology of constipation: It is known that constipation runs in families and till now there is no genetics proved to be implicated in the pathogenesis of constipation. Primarily, constipation is a closed circuit and it can start from any part of the circuit. With stool accumulation, the colonic and rectal wall is stretched so enteric nerve fibers are also stretched moreover the fecal matter squeeze the enteric nerve fibers and causing some sort of neuropraxia which impair the motility and more accumulation occurs and aggravate constipation.

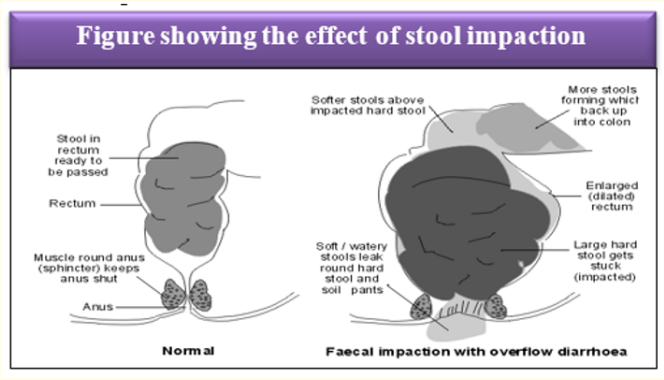

Figure 4

Constipation can be developed at any time, but commonly in these periods:

1. Solid food administration
2. Toilet training.
3. During times of the back to school.

Evaluation of constipating child:

Good History for identification of ROME IV criteria and Red flags. Discernibly, it can be through bowel diary which includes:

1. Onset of constipation
2. Frequency of defecation
3. Stool consistency
4. Stool size
5. Pain with defecation
6. Withholding maneuver
7. Soiling
8. Presence of any triggers of constipation
9. Medications
10. Family history and chronic disease.

Red flags:

1. Meconium passage time more than 48 hours
2. Faltering in growth
3. Blood in stool
4. Fever and vomiting and distention
5. Any perianal pathology
6. Signs of thyroid disease
7. Family history of HSD and neurological disorders.

Examinations:

1. Growth Assessment
2. Examination of the abdomen: It aims to identify fecal mass besides other abdominal findings.
3. Examination of the back: To identify the neurological disorder as a cause of constipation.
4. Perianal area: Inspection of any anal pathology and soiling.
5. Digital rectal examination (DRE): Is mandatory in case of: Uncertain diagnosis of functional constipation with no criteria of ROME IV, presence of any Red flags sings, and intractable constipation.

Investigations: Frequently there is no need to do investigations but it is indicated in:

1. Inreactable constipation
2. Presence of Red flags
3. Abdominal plain X-ray can be done.

Management principles: Treatment of constipation has many hinders and put forth of the formidable challenge to the child, treating doctor and family.it is a versatile treatment and it endorses the following:

1. Bowel retraining
2. Toilet desensitization.

Figure 5

Bowel Retraining is the cornerstone to take down.

Of constipation it constrains through:

1. Explain: The doctor should explain the condition to the child and the family and concentrate on the goal of management and its duration. It is slightly to use pictures to facilitate the explanation and reassuring the whole family. Singularly it is depicted to display that is up to 30 to 40 minutes.
2. Dis-impaction: Treatment success is lumped under the umbrella of effective dis-impaction and it is anticipated in the presence of soiling, fecal mass and fecal d loaded colon in the abdominal radiograph. It is the sprint part of management and it may take up from 2 to 6 days. Oral, rectal, or both laxatives can be used with large doses. as it is known osmotic laxatives are number one in treatment of dis-impaction and also if it is not effective in some conditions stimulant laxatives can be used.
3. Signs of dis-impaction success are passing a large amount of stool, little or no soiling, and empty colon and rectum in the abdominal radiograph.

4. Maintenance: The doctor and family of a constipating child have to commit to memory to keep the colon empty by using adequate, effective, therapeutic, and tolerable doses of the laxatives. The avenue to achieve that is continuing laxatives for at least 2 months with a regular amount of easy, soft stool passage and without the occurrence of any accidents during treatment. So, doctors can describes osmotic or stimulant or lubricants laxatives with adequate and precise follow up every two days depending on the bowel diary chart for Intimate detection of any accidents or development of new Red Lags. It is a truth generally acknowledged to start laxatives and incrementally withdraw them with doses titration.

5. Diet: Grossly it is recommended in this sight not to increase the battlefields in the treatment of constipation and not to force any dietary program. So, providing a regular and usual amount of fibers with an adequate amount of daily water about 4 - 8 cups with limiting the amount of milk consumption.

6. Biofeedback, Botulinum toxin, sacral nerve stimulators and surgical intervention are other modalities of management for children with failure of medical treatment and with surgical causes.

Most common causes of treatment failure:

1. Premature discontinuation of laxatives
2. Failed dis-impaction, and under treatment
3. Poor compliance and nonfunctional constipation.

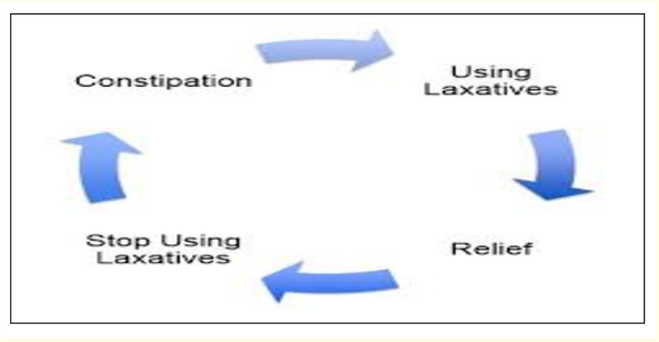

Figure 6

Algorithm for management of constipation in children

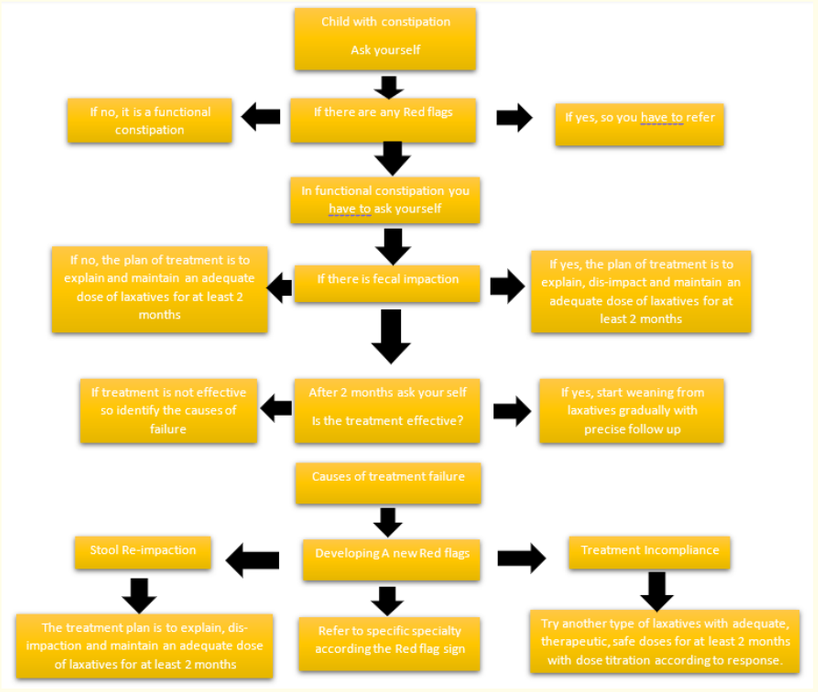

Figure 7

Keys for management of constipation:

1. Be so gentile when you see the constipating child in the first time and build a friendship with him for successful treatment.
2. Time is your friend and patient will improve with time.
3. The doctor who cannot take a good history is in domain of giving the bad treatment.
4. The patient who cannot give proper and adequate information is in danger of receiving the bad treatment.
5. Functional constipation does not affect the growth.
6. Constipation is rarely is the sole presentation of an organic disease.
7. Constipation is recognized and diagnosed based on the clinical presentations and does not need extensive investigations.
8. Soiling is usually starting involuntary without sensation due to neuropraxia of colonic wall.
9. Constipation treatment is usually child centered.
10. We have little or no chance to success in treatment if dis-impaction is not done properly.
11. Only 25% of patients will still have constipation.

Volume 9 Issue 7 July 2020