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Editorial
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Constipation in Indian Children

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Editorial

Constipation in Indian children is on increasing trend and most of it is functional; diagnosed in younger children. As per ROME III criteria [1,2], functional constipation is defined as presence of two or more of the following in absence of any organic pathology and the duration should be at least one month in < 4 years of age, and at least once per week for at least 2 months in children >(=) 4 years of age; - (i) Two or less defecations per week. (ii) At least one episode of fecal incontinence per week**.** (iii) History of retentive posture or stool withholding maneuver. (iv) History of painful or hard bowel movement. (v) Presence of large fecal mass in the rectum. (vi) History of large-diameter stools that may obstruct the toilet.

In children <4 years of age, the history of retentive posture or stool withholding maneuver is being replaced by history of excessive stool retention as retentive posture is difficult to assess in younger children. Criteria (i) says that two or less defecation/week will be one criterion for functional constipation in children. But bowel habits in most of the Indians is once or sometimes twice per day. So this number of defecation criteria should be accepted here with pinch of salt.

Because of improved economy of nation in post 90s; the affordability for food choices became better. Processed food, tinned food, readymade market food sand, and fast food culture rapidly entrapped Indian kids. On the other hand, there were also changes in Indian family pattern from combined family to nuclear family. Increasing nuclear families and working both parents find it easy with change in dietary lifestyle and they quickly accepted it. Changes in western dietary life style pattern and having fast food culture affected bowel habits significantly, may be the reason for significant increase in prevalence of functional constipation in children.

Constipation is mainly seen among toddlers and preschool children. In 17% to 40% of cases, constipation starts in first year of life [3,4]. 95% cases of total constipation are functional and only 5% are due to organic reasons [5]. Among the organic causes, Hirschsprung's disease is the most common and most important cause [6]. It has been shown that 99% healthy, term neonates and 50% babies with Hirschsprung's disease pass meconium in first 48h of life [7,8]. If clinical suspicion of Hirschsprung's disease is strong, barium enema is helpful but full-thickness rectal biopsy is must for definitive diagnosis. Main features which differentiates between functional constipation and Hirschsprung's disease is given in Table 1 [9].

Post 2000, Internet significantly decreased outdoor playtime in most of the Indian children. Increasing sedentary life also contributed for increase in functional constipation problem. As the child get habitual of Internet and mobile games, and spends hours and hours and tries to postpone his/her bowel habits for defecation leading to increase in prevalence and later increase in impact and severity of functional constipation. Persistent avoidance of defecation leads to hard stool in rectum. Later, hard stool becomes stony hard and causes severe anal pain that leads to avoidance of defecation by child and vicious circle goes on. If careful history and examination was performed, most of the time, no investigations required to diagnose functional constipation.

Management of constipation includes disimpaction, its maintenance, toilet training and high fiber diet. Treatment with laxatives in functional constipation is cornerstone in the management. Polyethylene glycol (PEG) is preferred laxatives for disimpaction and many times for maintenance also. Fecal impaction should be done by oral or by nasogastric tube. In small children (five years or less), nasogastric disimpaction is preferred. Dietary changes and lifestyle changes are important for management and prevention of constipation too. Usually whole of the family should support the child and ideally every members of the family should adopt the healthy dietary lifestyles changes. Restriction of fast foods, high fat foods are important and good intake of fresh fruits and fresh vegetables is advisable. Freshly home-prepared food should be preferred. TV, Internet, media viewing

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Table 1: Differences between funtional Constipation and Hirschsprung disease.

Features	Functional constipation	Hirschsprung's disease
Delayed passage of meconium	None	Common
Onset	After 2 years	At birth
Fecal incontinence	Common	Very rare
History of fissure	Common	Rare
Failure to thrive	Uncommon	Possible
Enterocolitis	None	Possible
Abdominal distension	Rare	Common
Rectal examination	Stool	Empty
Malnutrition	None	Possible

must not be more than 2 h per day. Child should not be addicted to any games. Outdoor physical activity must be encouraged. Child should have toilet training for fixed time and pattern. Encourage children to go to bed early and wake up well before timing of school so that they can have enough time for defecation in the morning. Also encourage child to drink lots of water.

References

1. Hyman PE, Milla PJ, Benninga MA, Davidson GP, Fleisher DF, Taminiau J. Childhood functional gastrointestinal disorders: neonate/toddler. Gastroenterology. 2006;130:1519-26.
2. Rasquin A, Di Lorenzo C, Forbes D, Guiraldes E, Hyams JS, Staiano A, et al. Childhood functional gastrointestinal disorders: child/adolescents. Gastroenterol. 2006;130:1527-37.
3. Amendola S, De-Angelis P, Dall'Oglio L, Di Abriola GF, Di Lorenzo M. Combined approach to functional constipation in children. J Pediatr Surg. 2003;38:819-23.
4. Loening-Baucke V. Constipation in early childhood: Patient characteristics, treatment and long-term follow up. Gut. 1993;34:1400-4.
5. Loening-Baucke V. Chronic constipation in children. Gastroenterol. 1993;105:1557-64.
6. Khanna V, Poddar U, Yachha SK. Constipation in Indian children: need for knowledge not the knife. Indian Pediatr. 2010;47:1025-30.
7. Metaj M, Laroia N, Lawrence RA, Ryan RM. Comparison of breast- and formula-fed normal new born in time to first stool and urine. J Perinatol. 2003;23:624-8.
8. Jung PM. Hirschsprung's disease: one surgeon's experience in one institution. J Pediatr Surg. 1995;30:646-51.
9. Poddar U. Approach to constipation in children. Ind. Pediatrics. 2016;52:319-327.