BACKGROUND AND AIM:
- The commonest indication for referral for paediatric anorectal studies is constipation.
- The prevalence of constipation in infants and toddlers varies from 3-5%. More than 90% are functional in aetiology, and are largely self limiting in duration.
- Persistence of symptoms, failure of response to routine laxatives and disimpaction techniques, need for prolonged therapy and social implications prompt anxious parents to seek medical consults.
- The utility of anorectal manometry in paediatric functional defaecatory disorders and as an adjunct to select localized anorectal mechanical disorders has been steadily growing.
- We aimed to study the utility of this procedure in our referral population.

STUDY TYPE:
- This was a retrospective study.
- Data obtained from January 2019 to November 2021 was analysed.

STUDY GROUP:
- Patients in the study were referred by paediatricians, paediatric gastroenterologists and paediatric surgeons.
- The study group included all children aged 1 month upto 14 years.
- Informed consent had been obtained from all parents. Prior procedure, a detailed history regarding the child’s bowel habits and general health was obtained by the performing doctor and/or the physician assistant.
- Out of the 91 parents who consented, 2 procedures were incomplete because of non-co-operation.
- A total of 89 patients’ data was analysed.
- In younger children upto 7 years, only RAIR was assessed. In children older than 7 and ability to comprehend the steps, the complete test, including balloon expulsion was performed.

RESULTS:
- A total of 89 procedures were analysed, out of which 49 were males and 40 females.
- 3 children were aged less than 1 year, 11 children between 1 and 2 years, 27 children between 2 and 4 years, 24 children between 5 and 7 years, and 24 children greater than 7 years.
- The commonest symptoms in order of occurrence were straining at stools, abnormal postures/withholding behaviour, prolonged laxative requirement, encopresis, low stool frequency and bleed PR.
- Four children had undergone procedures in childhood for suspected Hirschsprung’s disease.
- Pre procedure barium enema was available in 8 cases.
- With respect to manometry metrics, anal canal length was 2+/-1 cms, average basal anal sphincter pressures were 69.2 and squeeze pressures 141.8.
- Rectal hyposensitivity was present in greater than 50% of children who completed the procedure.
- RAIR was absent in 8 out of the 89 children. Out of these, two were confirmed by full thickness biopsy and three had a history of surgery.
- 31 children attempted the balloon expulsion step and 4 children had abnormal response suggestive of dyssynergy.

CONCLUSIONS:
- The commonest cause of paediatric constipation is functional. In younger children, onset of symptoms appears to start from the weaning period, in pre-schoolers during initiation of toilet training, and in older children, withholding behaviour after painful defecation.
- Rectal hyposensitivity was a significant finding in older children, and correlated with encopresis.
- Absence of RAIR was seen in 8%, and confirmed in 25% with biopsy.
- Anorectal manometry is an easy and safe procedure. It can be comfortably performed across all age groups and may obviate the need for further invasive tests, especially in the clinical suspicion of Hirschsprung’s disease.

REFERENCES:
- Mortada et al; High resolution anorectal manometry in children with functional constipation: Gastroenterology review 2016: 14(4)
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