

PLENARY 7 (PL7): Evidence-based recommendations for functional constipation in infants and children

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Marc Benninga is a medical graduate of University of Amsterdam, The Netherlands. As a research fellow at the Academic Medical Centre in Amsterdam, he was involved in extensive research on constipation and faecal incontinence in childhood with Jan Taminiau and Hans Büller. Subsequently he was trained in paediatrics at the Wilhelmina Children's Hospital in Utrecht, the Netherlands and he moved to Women's and Children's Hospital, Adelaide, Australia. With Geoff Davidson and Taher Omari at the, his research focus at Adelaide was maturation of upper gastrointestinal motility in very young infants. He rejoined the Academic Medical Centre in Amsterdam in 1999 and became the head, department of paediatric gastroenterology & Nutrition subsequently. Currently, he is engaged in clinical and research work on gastro-

oesophageal reflux disease, recurrent abdominal pain, constipation, functional non-retentive faecal incontinence and inflammatory bowel disease in childhood. He is a hockey player, who represented the Netherlands in Seoul Olympics in 1988.

SUMMARY

Chronic constipation is a common problem in childhood with an estimated prevalence of 3% in the Western world and is probably the most common gastrointestinal complaint in children. According to the ROME-III criteria, functional constipation is defined as a child experiencing 2 or more of the following symptoms: 1) two or fewer defecations in the toilet per week, 2) at least one episode of fecal incontinence per week, 3) stool retentive posturing, 4) painful or hard bowel movements, 5) presence of a large fecal mass in the rectum or 6) large diameter stools that may obstruct the toilet without objective evidence of a pathological condition. Infants up to 4 years of age have to fulfill two or more criteria for at least 1 month while children older than 4 years need at least 2 months of symptoms. Only less than 5% of children with constipation have an underlying disease. In the majority of patients, constipation is difficult to treat and often a long-lasting problem. Up to 50% of children followed for 6-12 mo continue to have symptoms and need ongoing laxative use.

Two evidence-based guidelines (the Netherlands and Great Britain) have been developed concerning the diagnostic and therapeutic approach for childhood constipation. To assist healthcare workers worldwide in the management of children with functional constipation, only recently the North American Society for Pediatric Gastroenterology and Nutrition (NASPGHAN) and the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) decided to develop an evidence-based guideline as a joined effort.

At present, a thorough medical history and complete physical exam are usually sufficient to confirm the diagnosis of functional constipation. Further laboratory or radiological investigations should only be performed in case of doubt, to exclude an underlying disease. Treatment of childhood constipation consists of four steps: (1) education, (2) disimpaction, (3) prevention of re-accumulation of faeces and (4) follow-up. Surprisingly, there is only limited evidence that laxative treatment is better than placebo in children with constipation. According to the available evidence, lactulose is recommended for children <1 year as first-choice treatment. For children older than 1 year, both lactulose and polyethylene glycol (PEG) with or without electrolytes can be used as first-choice treatment.

Session chair: Dr Shaman Rajindrajith