Bowel problems in children are common, up to 29% of children can be affected by functional constipation and functional fecal incontinence, where the symptom origin is not known. Furthermore, bowel problems are common in children with indications such as spina bifida, Hirschsprung disease, and anorectal malformation. Regardless of origin, constipation and fecal incontinence have a negative effect on children’s quality of life (QoL). Transanal irrigation (TAI) is a possible bowel management therapy for children with bowel problems.

TAI was first described as a bowel management therapy for children with spina bifida by Shandling and Gilmore in 1989. Since then, TAI has also developed into a well-tolerated and well-documented bowel management therapy for children with anorectal malformations and Hirschsprung disease. Moreover, promising data on children with functional constipation using TAI has been published.

In a consensus review by Mosiello et al 2016, TAI is reported to have an efficacy rate of 78% in children with both constipation and fecal incontinence. Pediatric patients and their parents/carers are also overall very satisfied with TAI therapy. However, younger children may have psychological and physiological issues with the rectal catheter, which is part of the TAI system, and in these patients, using a cone that is less invasive may be more suitable.

In pediatric studies of TAI, short-term adherence is reported to be between 67 and 97%. Long-term data from Liptak and Revelli show that 16 of 31 children with spina bifida still used TAI after 30 months. These results were based on the original technique described by Shandling and Gillmore, and the technological development has advanced significantly since then. For example, studies published after 2006 show adherence of between 73 and 100% when practicing TAI with newer, improved systems. All studies on TAI in children report few side effects. Mild general discomfort and abdominal pain were seen but the general response to bowel management was improved. Difficulty and/or pain during defecation, abdominal pain or discomfort before/after defecation, and sweating or headache during or after defecation all decreased. This corresponds well with observations of the adult population. Reasons for abandoning TAI include lack of efficacy, dislike or embarrassment, or remission of symptoms.

Few studies on children and TAI include QoL questionnaires, and there are not many validated options available. However, all publications that have attempted to measure QoL before and after using TAI show a significant increase. Choi et al show that the increase in QoL in children with spina bifida occurs within 3 months of starting the therapy, and evens out after that. One study also shows that children who are independent in their bowel routine have a higher QoL.

There are several aspects to consider when starting a child with TAI. It is important to carry out the right training, not only with the child, but also with the parents/carers. Continuously working with education, providing support during start-up, and encouraging the child’s self-management of TAI are also key for success. If these guidelines are followed, TAI has the possibility to become a successful bowel management therapy for children with bowel problems.

All studies on TAI in children report few side effects. Mild general discomfort and abdominal pain were seen but the general response to bowel management was improved. Difficulty and/or pain during defecation, abdominal pain or discomfort before/after defecation, and sweating or headache during or after defecation all decreased. This corresponds well with observations of the adult population. Reasons for abandoning TAI include lack of efficacy, dislike or embarrassment, or remission of symptoms.

Few studies on children and TAI include QoL questionnaires, and there are not many validated options available. However, all publications that have attempted to measure QoL before and after using TAI show a significant increase. Choi et al show that the increase in QoL in children with spina bifida occurs within 3 months of starting the therapy, and evens out after that. One study also shows that children who are independent in their bowel routine have a higher QoL.

There are several aspects to consider when starting a child with TAI. It is important to carry out the right training, not only with the child, but also with the parents/carers. Continuously working with education, providing support during start-up, and encouraging the child’s self-management of TAI are also key for success. If these guidelines are followed, TAI has the possibility to become a successful bowel management therapy for children with bowel problems.
REFERENCES


