

## TRANSANAL IRRIGATION – A PROMISING STRATEGY OF CONSERVATIVE TREATMENT FOR DEFAECATION DISORDERS; SHORT AND MEDIUM TERM RESULTS

### Hypothesis / aims of study

Transanal irrigation (TAI) has been proposed an appropriate treatment option for defaecation disorders (1). Especially individuals, unaccessible for surgical therapy or more invasive techniques (e.g. sacral nerve modulation), may benefit from this minimally invasive method. The aim of this study was to investigate the effect of TAI on patients with heterogenous defaecation disorders.

### Study design, materials and methods

We prospectively analysed patients with defaecation disorders (faecal incontinence, FI, and/or constipation) treated with a TAI system (Peristeen®, Coloplast, Vienna, Austria) on an out-patient basis. Patients were instructed in the use of TAI by a specially trained continence and stoma nurse in our clinic after exclusion of potential contraindications (e.g. pregnancy, ileus, IBD, acute diverticulitis). Follow-up visits were scheduled at 2 and 8 weeks for short term and at least 1 year after beginning of TAI for medium term results using a standardized questionnaire.

### Results

Since 2005 80 patients (male 17, female 63; mean age 33 years) with faecal incontinence (n=18;22%), constipation (n=19;24%), outlet obstruction (n=5;6%) or combined disorders (n=38;48%) were treated by TAI. Comorbidities as well as medical history of the patients were miscellaneous: 22 sacral/subsacral lesions of various etiologies (mostly gynaecological operations), 5 suprasacral posttraumatic lesions, 3 transplant recipients, 8 patients with lumbar radiculopathies, 4 multiple sclerosis and 14 myelomeningoceles patients. Seven patients underwent resection rectopexy for full thickness rectal prolapse and 14 patients were treated surgically because of haemorrhoidal disease or rectal mucosal prolapse (stapled haemorrhoidopexy or rubber band ligation). The female patients had at mean two vaginal births in their history. Mean duration of defaecation disorder was 10.3 years. Half of the patients were severely bothered due to FI or obstipation. In all 80 patients short term results, in 31 mean term results could be obtained.

In the learning phase the vast majority of the patients successfully used TAI daily (70%) in the morning (56%). However, in 54% of the patients involuntary bowel emptying occurred between two irrigations. Mean irrigation volume could be increased from 390mL in the learning phase to 534mL after 8 weeks of use.

In short term, after 8 weeks 74% (59/80) still used TAI with 78% satisfaction rate. Twenty-one (26%) patients stopped using TAI because of difficulties with handling or patient incomppliance.

In the medium term follow up 48% (15/31) still used TAI, 52% (16/31) discontinued due to the following reasons. In the myelomeningocele group 6/14: 3 because of ungoing crampy pains, 1 due to problems with the device, for 1 this therapy was too timeconsuming and 1 was eventually successful with medication. In the MS group 2/3: 1 had no median term success, 1 discontinued because of disease progression. In the group with sacral/subsacral lesions 8/14: 2 due to recovery, 2 due to problems with the device, for 1 therapy was too time consuming and in 3 with some recovery medication was successful. Parameters which compromise TAI mode of function were crampy pain during application, patient incomppliance, disability, lack of motivation (e.g. parents).

### Interpretation of results

Our data demonstrates that TAI can be easily applied and instructed in a heterogenous cohort of patients with FI and/or constipation. The increase in irrigation volumes with time reflects the positive effect of TAI on rectal capacity and compliance. The success of TAI is absolutely dependent on patients' motivation and compliance. Moreover the TAI system used was improved over the years with less technical problems for the patients.

### Concluding message

TAI is an easy and minimal-invasive method of treating defaecation disorders like FI and constipation with only few contraindications. Individual instruction by specially trained continence and stoma staff and patients' compliance are mandatory for the success of this strategy. After 8 weeks (short term) 74% and after a minimum follow-up of one year (medium term) 48% still used the TAI system.

## References

1. Koch et al. Prospective study of colonic irrigation for the treatment of defaecation disorders. Br J Surg 2008;95:1273-9

<i>Specify source of funding or grant</i>	NONE
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	observational study of an established conservative treatment method for defaecation disorders. No randomized controlled trial
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No