

## ADHERENCE TO TRANS-ANAL IRRIGATION (TAI): LONG TERM FOLLOW UP ANALYSIS IN A SINGLE CENTRE

### Hypothesis / aims of study

Neurogenic bowel dysfunction (NBD) affects quality of life: a lot of aspects, such as job, hobbies, daily activities, can be conditioned by symptoms related to NBD. Through the establishment of specific bowel program, it is possible to mitigate these problems. Bowel program should include the promotion of intestinal transit, modulation of the stool and the possibility to decide the time and place of defecation (1). Trans-anal irrigation (TAI) allows patients to establish a bowel routine congruent with their needs by reducing constipation and faecal incontinence. However, some long-term studies have shown a reasonable rate of non-adherence to treatment due to compromised effectiveness and difficulty to use. The percentage of drop out varies from 54% in a series of 19 months follow-up (3), to 14% in a series of children (2). Nevertheless there are only a few studies that investigate adherence to TAI in long term period.

Aim of this study is to analyse the number of patient still using TAI trained in our centre from 2008 to 2015. Moreover we want to discover the reasons that could determinate a non-adherence to treatment.

### Study design, materials and methods

From July 2008 to August 2015, 69 patients were trained in performing TAI using a system called Peristeen (Coloplast A/S). It is an integrated system consisting of a coated rectal balloon catheter, a control unit including a manual pump, and a water container. The catheter was inserted into the rectum and the balloon inflated to hold the catheter in the rectum while a tap water enema was slowly administered with the manual pump, keeping a stable pressure in the bowel. Subsequently, the balloon was deflated and the catheter removed, followed by bowel emptying of the enema and other bowel contents.

We performed a retrospective study through a phone interview to all the patients trained in TAI in our centre; we asked them if they still use the TAI; if they do not use TAI yet, we asked them the reason that had determinate the abandonment of the treatment.

### Results

From July 2008 to August 2015 we taught TAI technique to 69 patients. We called all these patients to make the phone interview. From the 69 patients trained in TAI in our centre, 11 patient were lost at follow up (1 patient died, 5 patients did not want to answer our questionnaire, 5 patient were not found because of lack of their phone number).

We used the 58 patients that answered our questions for the statistical analysis.

Mean follow-up is 51 months (min 8, max 93).

38 patients are male, 20 patients are female. 29 patients had a spinal cord injury, 6 patients spina bifida, 9 multiple sclerosis, 14 suffer from other pathologies. All of them were adults patients (more than 18 years old).

Successful outcome was reached in 37 patients (64%), while 21 patients abandoned TAI (36%). Among these 21 patients, the reasons for discontinuing TAI were: unsatisfactory effect in 6 (28.5%), troublesome in using Peristeen in 6 patients (28.5%), difficulty to source the TAI system (contract health business) in 4 patients (19%), other reasons in 5 patients (24%).

### Interpretation of results

First of all, our follow-up is among the longest ones reported in literature.

In our centre the percentage of drop out (36%) is lower than in other series of adult patients.

Moreover, we can divide our 58 patients in two groups: patients trained before 2013 (38 patients) and patients trained from June 2013 (20 patients), because from June 2013 we established the "TAI clinic", with a dedicated staff (physicians and nurses).

Among the last 20 patients, only 4 (20%) stopped TAI, with a retention rate of 80% in the last 3 years. The reasons of discontinuing TAI were unsatisfactory effect in 2 patients and difficulty to source the TAI system in the other 2 patients.

### Concluding message

Our study confirmed that TAI has a considerable dropout rate. The recurrent reasons for discontinuing TAI were unsatisfactory effect, troublesome in using the system and difficulty to source the irrigation system.

The drop out rate can be reduced by establishing a "TAI clinic" to better follow the patients. However, the problem of sourcing the irrigation system remains.

### References

1. Spinal Cord (2013), 1–7 2013 - Consensus review of best practice of transanal irrigation
2. Spinal Cord (2015) 53, 216–220 Long-term outcome of transanal irrigation for children with spina bifida
3. Spinal Cord (2009) 47, 545–549 - Long-term outcome and safety of transanal colonic irrigation for neurogenic bowel dysfunction

### Disclosures

**Funding:** Coloplast helped me to find literature **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** it has been done by a voluntary phone interview **Helsinki:** Yes **Informed Consent:** No