**SUBDIMS**

**In-between meeting SIG-SUBDIMS of 25-26.02.2011 - Amsterdam, The Netherlands**

**Participants:**

In total we had 12 participants from 7 different countries:

| | | |
|---|---|---|
| • Laura Lopes | IT | MD |
| • Sara Rinaldi | IT | PT |
| • Astrid Slettenaar | NL | RN-NP |
| • Monique Booy | NL | RN-NP |
| • Marco Heerings | NL | RN-NP |
| • Leen Bossaerts | BE | RN-PT |
| • Eeva-Maija Saaranto | FI | Uro & sex therapist |
| • Janni Eibeye | DK | RN |
| • Marita Flo | DK | RN |
| • Colette Benton | FR | MD |
| • Anton Emmanuel | UK | MD |
| • Piet Eelen | BE | RN |

**Program:**

Friday 25:

- Status of development of the 'Guidelines for bowel management'
  Presentation by Caroline Scheper, Coloplast® + Discussion
- Multi-centre study Peristeen, dr Laura Lopes
  Discussion

Saturday 26:

- Multi-centre study Peristeen, dr Laura Lopes
  Discussion
- Communication tool for SUBDIMS
  Presentation
- European Guidelines for bowel management for PwMS
  Discussion

**Report:**

- The multi-centre study 'A randomized, controlled trial of transanal irrigation versus conservative bowel management in MS patients'.
  We discussed the protocol concerning:
  - Study design
  - Inclusion and exclusion criteria
  - Assesment tools
  - Time line of the study
- As primary outcome the 'Bowel frequency Diary for constipation and incontinence' a 2 weeks diary can be used. We want to compare and discuss this diary with diaries currently used in the different rehabilitation centres.
  TO DO: send a copy of your own bowel diary (preferably in English) to
  ➔ piet.eelen@ms-centrum.be
- As secondary outcome urinary tract infections (UTI) will be taken in account.
  Laura will look for a acceptable definition of UTI.
- From T0 to T1: the conservative treatment is not stopped.
- Rehabilitation centres in countries were the Peristeen® device is not yet reimbursed can for ethical reasons not participate in the study. Maybe these centres can participate in the second fase of the study (T2 – T3) were no treatment is given (see protocol).
- A comment of Coloplast Italy: a centre from Germany is needed !!
- For the assesment of the control group, information from the American Guidelines of PVA can be used (see Moodle)
- Training will be done by expert nurse
- Aralyx = a suppository with bicarbonate that needs to be applied rectal. By the temperature of the body, the suppository will dissolve and a gas will come out that stimulate the rectum.
- We have to look for financial support by the European government??? (Piet)
- Insurance, approval by the Ethical committee and an Informed consent has to be written
- Every member of the in-between meeting can comment on the protocol.
  The protocol will be mailed by Laura Lopes to every member and will also be put on the Moodle. During the next RIMS meeting we will continue the discussion.
- See in attachment the second draft version of the protocol by dr Laura Lopes.

- Training session by Marco Heerings: How to use Moodle?
  You can find our Moodle on the website of the Dutch MS-network
  - Go to www.msnetwork.nl and choose 'English' if necessary
  - First you have to log in with your own username and password
    Everybody will get one in the next weeks.
    The temporary password is 'WELKOM'
  - Choose at the bottom on the left side 'SUBDIMS' ( = General forum for SUBDIMS)
    Here you can find the reports, protocols and articles.
    The Moodle site can also be used for gathering the content of the reviewed articles and as a communication tool between SIG-members.

  The SUBDIMS Moodle-page is in English
  To add an article, please send them to Marco Heerings → 'm.a.p.heerings@versatel.nl'
  Marco will put the articles on the Moodle in a personal file.
  Afterwards, the articles can be divided by topic of interest.

- Marco Heerings will try to make an 'Excel-file' to gather the summary of all reviewed articles (cfr 'Guidelines for BM by Coloplast') by the following structure:
    - author – year
    - grade of evidence A – B – C // 1 – 2 – 3 – 4
    - type of the study RCT – Peer review – Descriptive study - ….
    - population
    - inclusion criteria
    - intervention
    - control
    - outcome
    - results – remarks – comments

- European Guidelines for bowel management for PwMS
  Nearly 10 years ago, SUBDIMS published a review article on 'The Conservative Bladder Management in advanced Multiple Sclerosis'.
  In addition to this publication we want to publish a 'European Guidelines on bowel management for PwMS'.
  The guideline must be evidence based. Otherwise in every step of the guideline we have to reflect to the daily practice. Only by doing so the guideline will really be of a practical use for the nurses, doctors and maybe also for our patients.
  Both, the literature and expert opinion, are important to take into account.
  We discussed about the selected articles for literature review (see minutes of 2010) and listed up the important issues and chapters.
  In attachment you can find the first draft version of the content of the guideline.

**Future plans:**

- 13-14/05/2011: next RIMS conference Turku, Finland: discussion about the second draft version of the Peristeen® study protocol
- 4-5/11/2011: next in-between meeting in London, UK:
    - Peristeen® study
    - European Guidelines on bowel management for PwMS

**Possible items for the future:**

- Management of urinary retention
- When starting intermittent catheterization?
- Guidelines in collaboration with EAUN
- Strategies to increase compliance/adherence CISC.
- Botulinum toxin and OAB: When to advice?
- Building bridges between MS-nurses and Uro-nurses!!

**Attachment.**

1. Second draft version of the protocol by dr Laura Lopes in attachment.
2. First draft version of the content of the guidelines

Piet Eelen
Co-chair SIG SUBDIMS

1. Second draft version of the protocol by dr Laura Lopes in attachment.

**A randomized, controlled trial of transanal irrigation versus conservative bowel management in MS patients.**

**Background**

Multiple Sclerosis (MS) affects almost 3 million persons worldwide.

Bowel dysfunction is common in MS and ranges from 52%-73% ( 1 -4). It includes fecal incontinence and constipation. Frequently, both symptoms co-exist (3, 4 ). Bowel dysfunction has a great impact on quality of life of people with MS but has received little attention and is underestimated.

Fecal incontinence occurs in 25%-30% (1-3) of MS people and could be frequent or occasional. Hinds[3] found that incontinence occurred at least once in the preceding 3 months in 51% of MS patients. The impact of fecal incontinence is severe and leading to social isolation.

Constipation is the most frequent bowel disorder in MS and occurs in 39%-55% (1-3) and correlates with the duration of illness (4). In severe disable patients, constipation also increases the care burden.

More than one causative neurological lesion and some non-neurological causes may contribute to the symptoms (4). Pathophysiology of these disorders is not well understood.

In Munteis[5] study it was found that female sex, urinary dysfunction and disability level (EDSS) were predictors of anorectal dysfunction development in MS.

Bowel management in MS patients is currently empirical and include appropriate diet and fluid intake, physical exercise, manual evacuation, medications, enemas, rehabilitation of pelvic floor.

Transanal irrigation has been performed in patients with fecal incontinence or constipation due to other pathologies. Several studies have documented the efficacy and safety specially in spinal cord injured patients (6-10). There is also some evidence that transanal irrigation results in a lower total cost to society than conservative bowel management (11). In MS, this device is still used but there is no evidence in literature supporting the effectiveness on bowel management.

**Aim of The study**

The aim of this study is to compare transanal irrigation with conservative bowel management to define the effectiveness of transanal irrigation on MS patients with bowel dysfunction in a prospective randomized controlled multicenter trial.

**Materials and Methods**

**Study design**

The study will involve 6 European centers specialized in Multiple Sclerosis. The study will be a prospective, randomized, controlled, multicenter trial. Subjects will be enrolled according with MacDonald Criteria [12] and with neurogenic bowel dysfunction. MS patients will then be randomly assigned to two groups: Study Group (SG) and Control Group (CG). SG will be treated with transanal irrigation; CG group will be treated with conservative treatment. The trial period will be of 10-weeks.

**Sample size**

Sample size was determined comparing means of Neurogenic Bowel Disfunction (NDB) Score (13) from a previous work with the same design on spinal-cord-injured patients[8]. The criterion for significance (a) has been set at .05 (2-tailed) and the statistical power at least 80%. The proposed sample size would be of 82 subjects for each group.

**Randomization**

Patients will be prospectively screened in both inpatients and outpatients setting. Patients meeting the inclusion criteria will be approached and informed both in writing and orally about the trial, after which written consent will be obtained. Randomization will then be performed from a computer-generated sequence obtained from opening a sealed numbered envelope. Patients will be block-randomized across centers to ensure equal representation in the 2 groups at each centre. Each center will randomize about 28 subjects that progressively will access to the centre.

**Patients**

The MS centers will recruit MS patients with bowel symptoms that consecutively will access to the center in agreement with the followed criteria:

### *Inclusion Criteria*

1. Age older than 18
2. MS diagnosis following MacDonald Criteria
3. Patients with incontinence or constipation related symptoms defined by ROME III Criteria
4. Patients able to be transferred in toilet to evacuate

***Exclusion Criteria***

5. Relapse in the last three months
6. Cognitive impairment: MMSE < 24
7. Evidence of bowel obstruction or inflammatory bowel disease
8. Other CNS Disease
9. Diabetic Polyneuropathy
10. Previous abdominal or perineal surgery (excluding minor surgery as appendectomy or hemorrhoidectomy)
11. Pregnancy or lactation
12. Psychiatric disorders
13. Implant of sacral nerve stimulation

Patients will be excluded if will have a relapse during the study period.

### Assessments

For each patient the following data will be collected:

1) Age
2) Sex
3) Disease Duration
4) EDSS
5) Bowel symptoms check list (according to ROME III criteria)
6) Bristol stool form

Primary outcomes of the study are:

- NDB score
- Bowel frequency for constipation and n° of incontinence episodes (calculated with a 2 weeks bowel diary)
- Wexner scale for constipation; St. Mark scale for incontinence

Secondary outcomes of the study are:

- Single Quality of Life (QoL) question for bowel disorders - As part of the American Urological Association measure a single question was used to assess QoL due to urinary or bowel symptoms in another study [14]: *"If you were to spend the rest of your life with your bowel condition, just the way it is now, how would you feel about that?"* - The responses ranged from 0 (delighted) to 6 (terrible) with the followed scale: 0= delighted; 1=pleased ; 2=mostly satisfied 3=mixes, 4=mostly dissatisfied; 5=unhappy; 6=terrible
- Symptoms during or after defecation check list: No symptoms, abdominal pain, anorectal pain, chills, nausea, dizziness, sweating, pounding headache, facial flushing, pronounced general discomfort, other. Patients must answer "yes" or "no" to each symptom presented during the past week on this check list. The same check list was used in a similar study for spinal cord injury patients (8)
- N° of treated symptomatic Urinary tract infections (UTI) defined in according to European Urologic Association guide lines - It will ask to patients how many times they took antibiotics for symptomatic UTI in the last 2 months.

*All patients will be submitted to all outcomes, before treatment, after treatment and 12 weeks follow up.*

***Time line – weeks - evaluation***

- T0 - Base line (2 weeks): Clinical evaluation and collect data; 2 weeks bowel diary for constipation, n° of incontinence episodes; NBD score; Wexner scale and/or St Mark Scale; single QoL question; "symptoms during or after defecation check list during past week"; N° of treated symptomatic UTI in last 2 months.
- T1: treatment start (3$^{rd}$ week) – NBD Score; Wexner scale and/or St Mark Scale; single QoL question
- T1 – T2: 10 weeks (14$^{th}$ week) – treatment; last 4 weeks bowel diary (10$^{th}$ to 14$^{th}$ week); each week patients will answer to "symptoms during or after defecation check list during past week"
- T2: treatment end – NBD score; Wexner scale and/or St Mark Scale; single QoL question; symptoms during or after defecation check list during past week; N° of treated symptomatic UTI in last 2 months.
- T2-T3: 12 weeks (26$^{th}$ week) no treatment

- T3: follow up – 26th week – 2 weeks bowel diary; NBD score; Wexner scale and/or St Mark Scale; single QoL question; symptoms during or after defecation check list during past week; N° of treated symptomatic UTI in last 2 months.

During the trial period patients will be contacted by phone each week by an independent observer who will not participate in the training of the subject. A short structured questionnaire will be used to collect changing in symptoms during or after defecation, time consumption, urinary tract infections, level of dependency and medication changing.

**Treatment**

SG: Patients will be submitted to transanal irrigation for ten weeks without using conservative treatment. Each day the subjects or caregiver will be trained in irrigation until transanal irrigation could be performed properly and then they will use it in an appropriate way for each patient. The patient/caregiver training will be done by an expert nurse.

CG: patients will be submitted to conservative bowel management according to American Guidelines PVA

**Documents (to be attached)**

Bowel diary

Bowel symptoms check list (according to ROME III criteria)

Short structured questionnaire for call interview

Informed Consent

Ethical committee protocol (provided by each center)

**References**


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6. Christensen P, Olsen N, Krogh K, Bacher T, Laurberg S. *"Scintigraphic assessment of retrograde colonic washout in fecal incontinence and constipation"* – Dis Colon Rectum, 2003; 46:68-76
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13. Krogh K, Christensen P, Sabroe S, Laurberg S. *"Neurogenic bowel dysfunction score".*- Spinal Cord. 2006. 44(10):625-31
14. Khan, F, Pallant JF, Shea TL, Whishaw M. *"Multiple sclerosis: prevalence and factors impacting bladder and bowel function in an Australian community cohort".*- Disabil Rehabil, 2009. 31(19):1567-76.

2. First draft version of the content of the guidelines.

**European Guidelines on bowel management for PwMS**

1. Assessment / screening
   - Based on:
     - Pathophysiology
     - cfr NICE guidelines
   - any person who sees patients must be able to use these guidelines
   - simple investigations:
     - history of the patients
     - diary
   - Levels of assessment
     - Basic assessment:
       - Basic screening questions
         -> These must give you the key to define if you have to take care of this patient or not
     - First assessment:
       - To define the problem and the severity of the problem
       - This assessment has to be done by a experienced nurse, so refer patient to nurse
       - Diary
       - Scales
         - Wexner, …
     - Second line assessment
       - Refer patient to specialist care
       - Colon proctologist
       - X-ray, Pellets

2. Treatment / management options
   - levels 1 – 2 – 3 (from easy to complex treatment)

3. Plan of action
   - Problem description
   - Level of evidence
   - Grade of recommendations
   - Things to do
   - References

   PS. Literature has to be divided in same topics as the guideline chapters
   - assessment
   - second line exams
   - treatment
   - economics
   - neuromodulation
   - …

4. Algorithm
   - must be simple, clear and useful in daily practice