

Intestinal Transit Management System

Field of use

The MOWOOT II system has been developed for the treatment of chronic constipation, in particular intestinal transit disorders (Slow Transit Constipation) caused by:

- neurogenic functional limitations such as spinal cord injuries, spina bifida (myelomeningocele), multiple sclerosis, Parkinson's disease, etc.
- drug side effects e.g. neurological drugs, opiates, anticholinergics, diuretics, etc.
- endocrine disorders, e.g. hypothyroidism, hypercalcaemia. etc.
- systemic diseases, e.g. collagenosis, amyloidosis, etc.
- other (idiopathic) disorders of the colonic passage

Contraindications

Treatment is contraindicated in pregnancy, acute abdominal tumor diseases, unstable vertebral fracture, and acute inflammatory processes in the abdomen.

In the following cases, the MOWOOT II System may only be used after consultation with the attending physician:

- intra-abdominal implant (e.g., pump, catheter, SARS implant) when located between the colon and the pneumatically operated actuators of the MOWOOT II belt,
- abdominal stoma,
- cerebral shunt,
- inguinal, navel or abdominal hernia,
- rectal / vaginal prolapse.

Side Effects

So far no adverse side effects are known. If the treatment causes discomfort or pain, seek the advice of a medical professional or contact the dealer.

Components of the MOWOOT II System

The MOWOOT II System consists of an exo-peristaltic belt that is fitted to the patients abdominal circumference and a pneumatic desktop unit that drives and controls the exo-peristaltic elements of the belt. Desktop unit, Exo-peristaltic belts, air-plug and power supply can be purchased separately. Only original MOWOOT II components and spare parts may be used.

Article ID #	Article
	Pneumatic Desktop Device w/ Air-Plug and Power Supply Adaptor
	Exopersitaltic Belt Size S – abdominal circumference 65-85 cm*
	Exopersitaltic Belt Size M – abdominal circumference 80-100 cm*
	Exopersitaltic Belt Size L – abdominal circumference 95-115 cm*
	Exopersitaltic Belt Size XL – abdominal circumference 110-130cm*
	Air-Plug
	Power Supply Adaptor

*measured level with navel

The MOWOOT II system is maintenance-free when used as intended.

Distributor:

Manufacturer: USMIMA S.L. Avda. Cornellà 142,
08950 Esplugues de Llobregat (Barcelona). Spain

Neurogenic Bowel Disorders

Intestinal Transit Management System



Intermittent Colonic Exo-peristaltic (I.C.E.) Therapy
for Intestinal Transit Disorders
(Slow Transit Constipation)

Slow Intestinal Transit Constipation

Neurogenic bowel dysfunction - constipation

Neurogenic bowel dysfunction is a concomitant of any spinal cord injury (1). It is also associated with multiple sclerosis, Parkinson's disease and many other neurological disorders. A clinical consequence of neurogenic bowel dysfunction is constipation. The treatment of chronic constipation in adults is based on a step-by-step approach (2).

Constipation is very often due to slowed-down stool transport (slow transit constipation). For the basic treatment of Slow Transit Constipation, the MOWOOT system was developed in cooperation with a leading neurological rehabilitation facility, the Institut Guttmann in Barcelona, Spain.



Illustration (left):

Treatment approach for slow transit constipation, including I.C.E. therapy with MOWOOT.

The MOWOOT II System is designed to be used immediately after the first stage of the treatment schedule of chronic constipation.

Intermittent Colonic Exopertaltic (I.C.E.) Therapy



The I.C.E. Therapy is purely physical, physiological, non-invasive and non-pharmacological. The MOWOOT II exo-peristaltic belt utilizes a novel pneumatic technology: four actuators with real-time pressure-sensors produce a wave-like exo-peristaltic effect that promotes intestinal secretion and intestinal transit. This multi-stage, sequential, rhythmic stimulation of the ascending and descending colon is inspired by the proven colon massage, which has been shown to be particularly effective for slow intestinal transit in neurogenic disorders of the intestine.

The pneumatic desktop unit drives the actuators in the belt and controls the duration of a treatment session (up to 20 minutes) and the frequency of the exo-peristaltic cycles (4.5 to 11.0 seconds per cycle).

Solution for Chronic Constipation

Convincing benefits of using the MOWOOT II system (3) (4)

Effective bowel management

- easy defecation, rapid emptying without excessive pressing, feeling of complete bowel emptying
- pain relief in the abdomen, painfree or painless bowel movements
- regular, normal-frequent bowel movements
- flatulence-reduction
- reduced burden of laxatives/drugs

Cost Savings

- laxatives/drugs
- reduction of follow-up costs, e.g. due to complications, surgical procedures, invasive electrical stimulation, extra nursing time, etc.



Pneumatic Desktop Device



Exo-pertaltic Belt

Effectiveness of I.C.E. Therapy with MOWOOT (3) (4):

- MOWOOT improves stool consistency (Bristol scale)
- MOWOOT increases the frequency of defecation
- MOWOOT reduces the duration of defecation
- MOWOOT reduces the number of failed defecation attempts
- MOWOOT improves overall chronic constipation

References:

- (1) Kurze, proposed German guideline: "Neurogenic intestinal dysfunction in paraplegia", registration number 179 - 004; retrieved 28.11.2018 <https://www.awmf.org/leitlinien/detail/anmeldung/1/II/179-004.html>
- (2) V. Andresen *et al.* (2013), German guideline "Chronic Constipation in Adults", in revision, registration number 021 - 019; retrieved 28.11.2018 <https://www.awmf.org/leitlinien/detail/II/021-019.html>
- (3) Herrero-Fresneda *et al.* (2016) Eur Ger Med Supp: P-593
- (4) Herrero-Fresneda *et al.* (2018) J Gastrointest Dig Syst, Vol 8 P46

Physiological. Non-invasive. Non-drug.