

Treatment Options for Neurogenic Bowel Dysfunction

What is NBD?

Neurogenic Bowel Dysfunction (NBD) is a physically and socially debilitating bowel disease stemming from injury or disease of the central nervous system (brain and/or spinal cord). When the bowel is impaired to perform normal gastrointestinal and anorectal function as a result of damage to the nerve tissue innervating the colon and rectum, a failure to empty the bowel (fecal constipation) or failure to contain stool (fecal incontinence) results, the condition is called Neurogenic Bowel.

Treatments for NBD¹

The treatment pathway for NBD is typically a step-wise approach that includes minimally invasive interventions to promote fecal evacuation to more invasive surgical treatments that include ostomy and stoma creation.

Standard Bowel Management Interventions

Over the counter treatment

The first approach is a customized bowel management program of over-the-counter interventions that may include stimulant and/or osmotic laxatives, suppositories, stool softeners, fiber supplements, and monitoring diet and hydration. Physical interventions include digital stimulation and manual evacuation. A bowel program often addresses increasing the firmness of loose stool or softening hard, constipated stool or both.

Gravity or cone enemas

Large volume tap-water gravity or cone enemas are common in the pediatric or spina bifida population.² For adults, these methods are not a common treatment due to various reasons.³ Alternatively, mini enemas are used. The difference is they have additives, docusate or bisacodyl, which act as a rectal irritant or stool softener.⁴

Transanal Irrigation

TAI is indicated as a second line treatment strategy in the treatment approach of NBD and is recommended as a treatment option when standard bowel care treatments have failed to adequately control symptoms or are deemed unsatisfactory. TAI with Peristeen® is a single-use rectal inflatable balloon catheter that is inserted into the rectum to create a seal and a multi-use manual pump that uses air pressure to pump water into the colon to promote removal of the contents of the lower colon.

Surgical Interventions

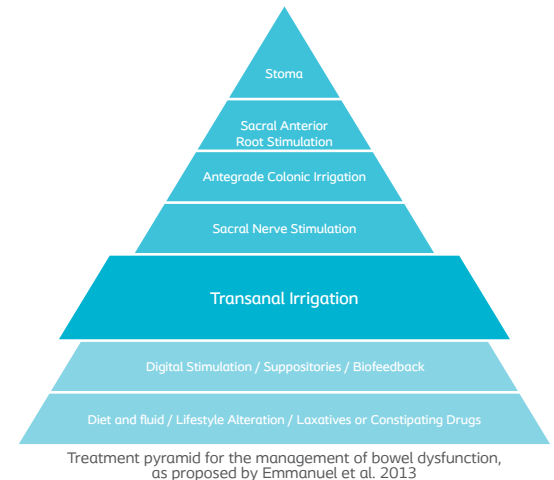
MACE/ACE Malone

The Malone Antegrade Continence Enema (MACE or ACE) is a type of surgery to create a channel in the appendix that for the administration of an Antegrade Continence Enema (ACE). Antegrade basically means from above or moving forward; water is administered via a catheter through the surgically created opening to produce a bowel movement.

Colostomy or Stoma Creation

A stoma is a surgically created hole in the colon called a colostomy. This usually is a last resort treatment for NBD, when all other treatments have failed. Ostomy disposable supplies include a barrier that adheres to the skin and a pouch that is used to collect the contents of the bowel.

No invasive procedure is ever without risk. Over half of patients who have a surgical procedure have experienced a complication. These may include stenosis, stoma closure, surgical or stoma revision, stoma retraction, paralytic ileus, bowel obstruction, peri-stomal hernia, diversion colitis, infection, leakage, skin problems or skin rashes.⁵



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3. Consortium for Spinal Cord Medicine. Neurogenic Bowel Management in Adults with Spinal Cord Injury. Paralyzed Veterans of America; 1998.
4. Consortium for Spinal Cord Medicine. Management of Neurogenic Bowel Dysfunction in Adults with Spinal Cord Injury. Paralyzed Veterans of America; 2020.
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