

Neurogenic Bowel Dysfunction in Patients with Spinal Cord Injury and Multiple Sclerosis - An Updated and Simplified Treatment Algorithm

Fredrika S. Magnuson, Peter Christensen, Andrei Krassioukov, Gianna Rodriguez, Anton Emmanuel, Steven Kirshblum and Klaus Krogh. J Clin Med. 2023;12(22).

Objective

This review aims to facilitate neurogenic bowel dysfunction (NBD) treatment in patients with spinal cord lesions (SCI) or multiple sclerosis (MS), by proposing an updated treatment algorithm, in better alignment with clinical practice.

Introduction

Patients suffering from neurogenic conditions are often burdened with bowel disorders such as constipation, and/or fecal incontinence, impacting both mental and physical health. Unfortunately, the treatment of NBD remains challenging.

The existing treatment pyramid from 2013

In 2013, the first consensus review describing a stepped approach to the treatment of NBD was published¹, based primarily on empirical evidence and expert opinions. This algorithm has become widely acknowledged as the 7 steps treatment pyramid (Fig. 1) describing first-line conservative bowel management options, followed by the minimally invasive therapies (such as transanal irrigation (TAI)), before ending up with more invasive options covering various surgical procedures.

Including both treatments still in their experimental stage as well as treatments not available in every treatment center, the 2013 pyramid has shown, not to be completely in line with the actual clinical practice.

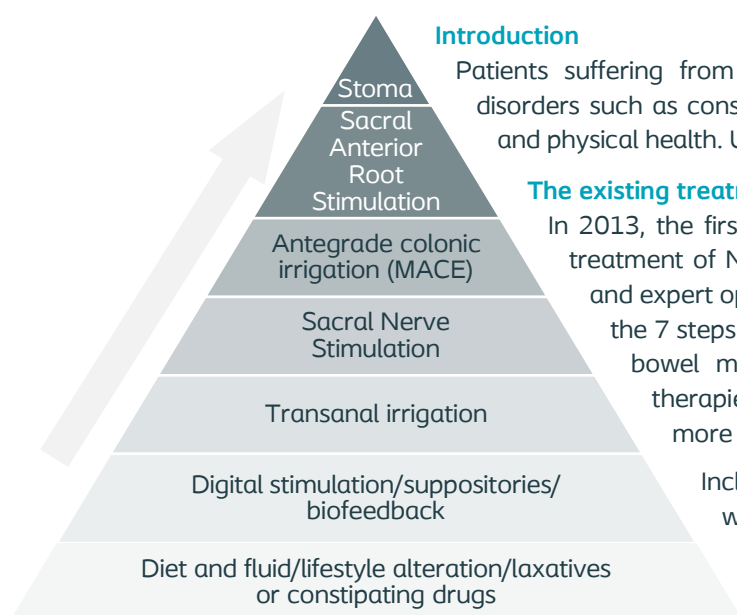


Fig. 1. Existing treatment pyramid from 2013 presented as part of the "Consensus review of best practice of transanal irrigation in adults"¹.

The updated and simplified treatment algorithm

Based on the available evidence, a group of experts (including 3 specialists who also took part in generating the existing pyramid) suggests an updated and more simplified treatment algorithm for NBD in SCI and MS patients (Fig. 2). The updated pyramid is reduced to 3 steps covering standard bowel management, TAI, and surgical intervention, while placing the remaining treatment options in a separate box as optional or experimental treatments. These updates are reflective of the existing clinical practice as well as the exploratory state and availability/eligibility of the various treatment options for the individual patient.

Conclusion

Treatment of NBD is challenging, and the degree of evidence supporting the different treatment options varies. Here a simplified version of the existing treatment pyramid is proposed, consisting of only 3 steps, while exploratory and experimental treatments are placed in a separate box to better mirror the actual clinical practice.

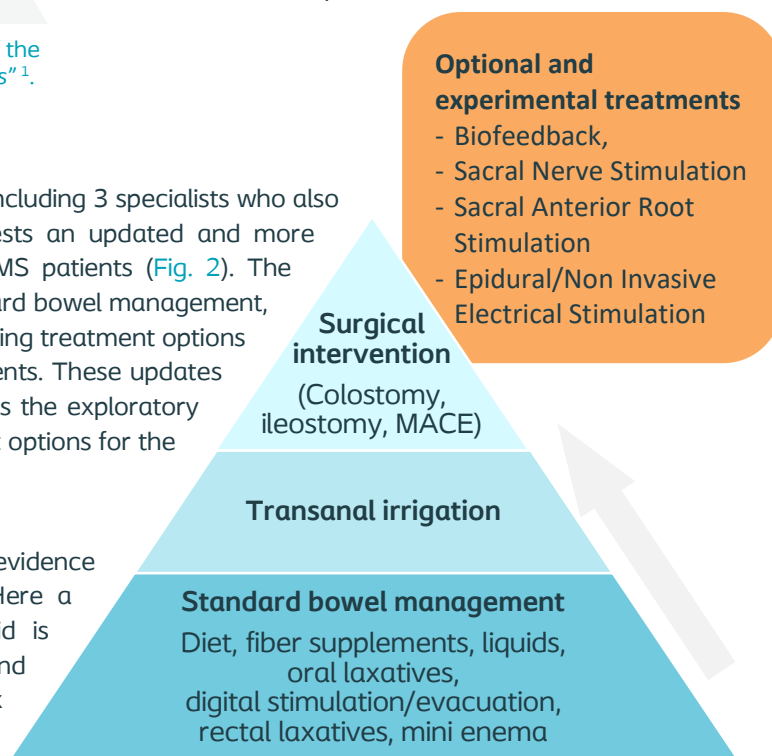


Fig. 2. Updated and simplified treatment algorithm for NBD patients with optional and experimental treatments placed outside the pyramid.