

| Authors; Country Date included in the review Total Sample Size Score | Methods Databases Level of Evidence | Conclusions |
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| <p>Krassioukov et al. 2010 Canada</p> <p>Published articles from 1950 to July 2009</p> <p>N=57 studies</p> <p>AMSTAR: 5</p> | <p>Objectives: To systematically review the evidence for the management of neurogenic bowel in individuals with SCI.</p> <p>Methods: Literature search for randomized-controlled trials (RCTs), prospective cohort, case-control, pre-post studies, and case reports assessing pharmacological and non-pharmacological interventions for management of neurogenic bowel after SCI. PEDRo Scale was used to grade RCTs (0-11).</p> <p>Databases: PubMed/MEDLINE, CINAHL, EMBASE, PsycINFO.</p> | <ol style="list-style-type: none"> 1. Multifaceted bowel management programs are the first approach to neurogenic bowel programs and are supported by lower-level evidence (3 pre-post studies, level 4). 2. More than one intervention is usually necessary for individuals to develop an effective bowel routine (e.g., digital rectal stimulation with diet and fluid intake). 3. Evidence is low for non-pharmacological approaches and high for pharmacological interventions. 4. Diet and fluid intake are important components of multifaceted bowel management programs. 5. Transanal irrigation is a promising technique to reduce constipation and fecal incontinence 6. Colostomy is a safe, effective method of managing severe and chronic GI problems, and assist with treating perianal pressure ulcers in persons with SCI. |
| <p>Coggrave et al. 2014 UK</p> <p>Published articles up to June 2012</p> <p>N=20 studies</p> | <p>Objectives: To determine the effects of management strategies for faecal incontinence and constipation in people with a neurological disease or injury affecting the central nervous system.</p> | <ol style="list-style-type: none"> 1. Small trials demonstrated statistically significant improvement in total bowel care time comparing: <ul style="list-style-type: none"> - intramuscular neostigmine-glycopyrrolate and placebo (mean difference (MD)=23.3 min) - bisacodyl in polyethylene glycol suppository (43 min) |

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| <p>AMSTAR: 9</p> | <p>Methods: Literature search for randomized and quasi-randomized studies evaluating any type of intervention for management of fecal incontinence and constipation in people with central neurological disease or injury. Only SCI findings are reported.</p> <p>Databases: Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, MEDLINE In-Process, CINAHL, search of relevant journals and conference proceedings.</p> | <p>compared with bisacodyl in vegetable oil suppository (74.5 min) and</p> <ul style="list-style-type: none"> - use of an abdominal electrical stimulation belt vs no stimulation (MD=29.3 min). 2. One trial showed transanal irrigation significantly improved a range of outcomes compared to conservative management. There was higher patient satisfaction with this method. 3. Three trials of cisapride were withdrawn from the review as the drug is no longer available. |
| <p>Stoffel et al. 2018 USA Topic paper SIU-ICUD joint consultation</p> | <p>Objectives: The purpose of the SIU-ICUD workgroup was to identify, assess, and summarize evidence and expert opinion-based themes and recommendations regarding bowel function and management in SCI populations</p> <p>Methods: A workgroup was formed, and a literature search was completed of English manuscripts regarding neurogenic bowel management</p> <p>Databases: N/A</p> | <ul style="list-style-type: none"> 1. Patients with injuries above the conus medullaris (above approximately L1–L2) generally have symptoms of increased bowel motility and poor anorectal sphincter relaxation. 2. Patients with injuries below the conus medullaris (below approximately L2) are more likely to have an areflexic colon and low anal sphincter tone. 3. Retrospective studies also suggest that complete SCI lesions result in slower colon transit time compared to incomplete injuries (Valles et al 2009). 4. Severity of neurogenic bowel symptoms affect overall physical functioning and QOL in SCI patients. 5. QOL survey data demonstrate |

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| | | <p>that constipation, fecal incontinence, and fecal urgency are the most common bothersome bowel symptoms in SCI patients.</p> <p>6. High-fiber diet may increase colon transit time, resulting in more constipation in SCI patients</p> <p>7. Transanal irrigation is an effective, low-morbidity intervention for refractory neurogenic bowel in SCI patients.</p> <p>8. Colostomy may significantly reduce stool transit time in SCI patients compared to conservative bowel management plans.</p> <p>9. Colostomy may offer better QOL compared to ileostomy.</p> |