

| Author Year; Country Score Research Design Total Sample Size | Methods | Outcome |
|---|--|--|
| <p>Coggrave et al. 2009 UK Pre-post Level 4 N=1334</p> | <p>Objective: To describe bowel management in community-dwelling spinal cord-injured (SCI) individuals and to explore associations between age, injury, dependency, problems, interventions and satisfaction.</p> <p>Population: 1334 SCI outpatients aged 19-91 yrs.</p> <p>Treatment: Postal survey</p> <p>Outcome Measures: method of evacuation; number of interventions used before finding a successful protocol; assistance with bowel care.</p> | <ol style="list-style-type: none"> 1. 56% of respondents used digital rectal evacuation; 36% stimulant laxatives, 15% osmotic, 6% bulk formers, 3% stool softeners. 2. Median number of interventions used by an individual was 3. 3. More than 1/3 of respondents needed assistance with bowel care. 4. Digital evacuation was associated with better outcomes in independent individuals with thoracic lesions. |
| <p>Correa & Rotter 2000 Chile Pre-post Level 4 N=38</p> | <p>Objective: To assess the state of the neurological bowel in spinal cord injured (SCI) patients, design and apply a program for the comprehensive management of neurogenic bowel and evaluate outcome.</p> <p>Population: Age: range 19-71 yrs; 21 participants with complete injuries (2 with tetraplegia and 19 with paraplegia), 10 with incomplete injuries, 7 with conus medullaris and cauda equina; Duration of injury: range 5 months -16 yrs.</p> <p>Treatment: Intestinal program administration with 6-month follow-up. The program involved monthly evaluations of the patient's intestinal function, symptoms, and</p> | <ol style="list-style-type: none"> 1. When comparing pre and post lesion intestinal function at the onset of the study, there was significantly decreased frequency of defecations, ranging from 8.2(+3.8) to 5.2(+3.6) times a week ($p < 0.001$; t paired). 2. Evacuation time significantly increased, ranging from 9.7(+0.9) to 24.1(+23.9) min ($p < 0.001$; t paired). 3. Participants felt their DIE scores after their SCI worsened (from 2.6% to 26.3%) compared to before their SCI (based on subjective recall). 4. The most frequent GI symptom was abdominal distention. The incidence of abdominal distention was reduced from |

| Author Year; Country Score Research Design Total Sample Size | Methods | Outcome |
|--|---|---|
| | <p>complications. Patients were educated on inadequate practices of evacuation and medications were changed when appropriate. Manual evacuation was discouraged as high-risk.</p> <p>Outcome Measures: Difficult Intestinal Evacuation (DIE) scale; colonic transit time; anorectal manometry; recto-colonoscopy; GI symptoms.</p> | <p>50% to 23.5% after the program.</p> <p>5. With the intestinal program, the incidence of DIE was reduced from 26.3% to 8.8% and episodes of manual extraction was reduced from 53% to 37%.</p> <p>6. An objective to eliminate use of manual evacuation, stimulant laxatives and/or enemas was successful in that 19 patients were using manual evacuation daily pre-trial while only 8 did post-trial.</p> |
| Author Year; Country Score Research Design Total Sample Size | Methods | Outcome |
| <p>Solomons & Woodward 2013 Britain</p> <p>Systematically reviewed articles from electronic databases no date limits applied</p> <p>N=7</p> <p>Level of evidence: Methodological quality not assessed</p> | <p>Objective: Assess the quality of evidence available on digital removal of faeces for people with SCI.</p> <p>Method: Systematic literature review of the quality of evidence available on fecal manual evacuation for individuals with SCI.</p> <p>Databases: CINAHL, British Nursing index, EMBASE, Medline</p> | <ol style="list-style-type: none"> 1. All seven of the papers discussed in this review were of limited reliability as they studied heterogeneous populations. 2. Bowel protocols should not be carried out rigidly but rather should be used in guided experimentation to assist the SCI patient to find a bowel management program that works for them. 3. Digital rectal removal of feces remains a necessary intervention for many patients. More research and training are needed on this and other neurogenic bowel management. |

| | | |
|--|--|---|
| <p>Type of study: 1 RCT 4 case-controls 1 cross-sectional 1 case-control</p> <p>AMSTAR: 2</p> | | <p>4. The low status of bowel care in nursing and wider society needs to be challenged so that people with SCI can benefit from high quality bowel care and associated improvements in quality of life.</p> |
|--|--|---|