| Author Year;<br>Country<br>Score<br>Research<br>Design<br>Total Sample<br>Size | Methods  | Outcome  |
|--|--|--|
| Teng et al. 2018 USA Case-control Level 3 N=255                                | Objective: To compare adequacy of colonoscopy bowel preparation and diagnostic findings between persons with SCI receiving an extended inpatient bowel preparation and the general population.  Population: N=255 N: 85 with SCI, 170 control SCI group: Female: 0% Age: 63.3 (7.2) Time since injury: 20.6 (14.6) y Level: Cervical 53 (62%), thoracic 29 (34%) Lumbar 3 (4%)  Severity: AIS A 35 (41%) AIS B 7 (8%) AIS C 7 (8%) AIS D 36 (42%)  Control population: Age: 61.2 (10.7) Female: 8% Treatment: N/A Outcome Measures: Reviewed an electronic database of all colonoscopies performed at a tertiary Veterans Affairs medical center between 7/12/13 and 15/10/15. Patients with SCI received a multi-day bowel preparation with magnesium citrate, and 8-10 liters of | <ol> <li>The SCI patient group was more likely to receive a colonoscopy for average risk screening (25 vs. 14%) (p=0.03).</li> <li>There was no difference in adequacy of bowel preparation (87 vs. 85%, p=0.73) or adenoma detection rate (55 vs. 51%, p=0.59) when comparing patients with SCI with the control population.</li> </ol> |

| Author Year;<br>Country<br>Score<br>Research<br>Design<br>Total Sample<br>Size | Methods   | Outcome   |
|--|---|---|
|  | polyethylene glycol-3350 and electrolyte colonic lavage solution (PEG-ELS) over two and one half days. The control population received a standard bowel preparation consisting of magnesium citrate and 4 liters of PEG-ELS over 1 day.   |   |
| Hayman et al.  2013 USA Case series Level 4 N=311                              | Objective: To determine the safety of colonoscopy. Population: Veterans with SCI and disorders undergoing colonscopy N=306 Male, N=5 Female Median age: 61 y (IQR 53-69 y) SCI level: 149 cervical, 50 upper thoracic (T6 and above), 78 lower thoracic (T7 and below), 31 lumbar/sacral, 3 missing.  89 complete, 156 incomplete, 66 missing 151 tetraplegia, 159 paraplegia Treatment: N/A Outcome Measures: Medical record review for patient demographics, procedure indications, pathological findings, rates of bowel preparation adequacy, and indicdence of post-procedural complications | <ol> <li>40% of the 368 colonoscopies had a polypectomy performed.</li> <li>Diagnostic colonoscopies were less likely to require polypectomy (31 v 48%) but were more likely to be positive for neoplasm (76 vs. 69%, p=0.0005).</li> <li>There was a significant increase in the proportion of colonoscopies with adequate bowel preparation over time (12.5% in quartile 1 to 58.6% in quartile 4, p=0.001)</li> <li>Quality of preparation was not associated with SCI level or completeness.</li> <li>There was a high percentage of procedures that did not document quality of bowel preparation, but this percentage significantly decreased from quartile 1 to quartile 4 (70% to 6%, p&lt;0.001).</li> </ol> |
| Song et al. 2018 USA Case series Level 4 N=53                                  | <b>Objective:</b> To assess the safety, tolerability, and efficacy of a multi-day inpatient bowel preparation regimen in a  | <ol> <li>Bowel preparation was tolerated<br/>by 91%</li> <li>89% had adequate quality of<br/>bowel preparation at</li> </ol>  |

| Author Year;<br>Country<br>Score<br>Research<br>Design<br>Total Sample<br>Size | Methods   | Outcome  |
|--|---|--|
|  | population of patients with SCI.  Population: N=56 Female: 0% Age: mean 64.1 ± 7.3 years Time since injury: mean 20.0 ± 13.8 years. Level: 68% cervical, 30% thoracic, 2% lumbar Severity: 41% AIS A, 7% AIS B, 9% AIS C 43% AIS D Treatment: Day 1: clear liquid diet starts in the evening with 480 mL of magnesium citrate after dinner Day 2: continue clear liquid diet, and PEG-ELS 4L over 2 hours in the morning Day 3: continue clear liquid diet until midnight and then Nothing by mouth. PEG-ELS 4 over 2 hours in the morning Day 4: if rectal colostomy output is still not clear then PEG-ELS 2L prior to colonoscopy Outcome Measures: Adequacy of colonic cleansing was based on either the Aronchick or the Boston Bowel Preparation Scale, people demonstrated adequate bowel cleansing if they graded "excellent" or "good" on the Aronchick scale OR if they had Boston score of greater than or equal to 2 in all | colonoscopy (no actual values of Aronchick or Boston Bowel Preparation scores were provided). No significant differences between people who had inadequate and adequate quality bowel preparations regarding the completing of full bowel preparation, AIS, level of injury, frequency of bowel care, or bowel care method  3. Results of serum chemistry testing:  - Calcium decreased by 0.25 mg/dL (p=0.00) - Phosphate decreased by 0.45mg/dL (p=0.00) - BUN decreased by 7.46 mg/dL (p=0.00) - Creatinine decreased by 0.05 mg/dL (p=0.00) - No significant changes in sodium, potassium, chloride, bicarbonate, glucose, or magnesium levels |

| Author Year;<br>Country<br>Score<br>Research<br>Design<br>Total Sample<br>Size          | Methods   | Outcome  |
|---|---|--|
|   | three bowel segments; serum chemistry testing   |  |
| Deroche et al. 2017 USA Case-control Level 3 N=17,842 with 35,036 controls; N=7,126 SCI | Objective: Investigate whether adults, aged 50-75 years, with one of three disabilities (blind/low vision [BLV], intellectual disability [ID], spinal cord injury [SCI]) receive CRC screening at rates equivalent to adults without the three disabilities, by accounting for combinations of recommended CRC screenings during a 10-year period (colonoscopy, sigmoidoscopy, fecal occult blood test).  Population: Adults aged 50-75 years with one of three disabilities (blind/low vision (BLV), intellectual disability (ID), or spinal cord injury (SCI)  Treatment: Colorectal cancer (CRC) screening  Outcome Measures:  Proportion of adherence to and adjusted odds of CRC screening over time | 1. Colonoscopy was the most prevalent screening test- for people with SCI at least one colonoscopy was received by 41.67% of people vs. 41.5% in the comparison group. |