

Bowel care for individuals with spinal cord injury: comparison of four approaches.

Amir I, Sharma R, Bauman WA, Korsten MA.

Gastroenterology Section, Bronx VA Medical Center, NY 10468, USA.

The efficacies of four bowel care regimens (bisacodyl suppositories, glycerin suppositories, mineral oil enemas and docusate sodium mini-enemas) were compared in seven subjects with traumatic spinal cord injury. Efficacy was assessed in terms of colonic transit time, bowel evacuation time and subjective responses to a questionnaire. Both docusate sodium mini-enemas and mineral oil enemas decreased total and left-sided colonic transit time. However, docusate sodium mini-enemas were superior to mineral oil enemas in terms of the decrease in bowel evacuation time and symptom reduction. Results in this small group of subjects suggest that docusate sodium mini-enemas may have advantages in the management of bowel evacuation in individuals with spinal cord injury.

PMID: 9541883 [PubMed - indexed for MEDLINE]

Amir et al. 1998; USA

Downs & Black score=9

Cohort N=7

Population: Age range=21-76yrs, C4-T12, 6 tetraplegics, 1 paraplegic, length of injury range=2-25yrs

Treatment: Each subject was studied after receiving one week of therapy with one of the following four modalities: 1) two bisacodyl suppositories, 2) two glycerin suppositories, 3) one mineral oil enema and 4) one docusate sodium mini enema (Theravac SB) daily.

Outcome Measures: total colonic and segmental colonic transit times 1. The total CTT was significantly reduced with docusate sodium mini-enemas. 2. There was no significant difference in total CTT between docusate sodium and mineral oil enema, and both produced significantly shorter transit times compared to bisacodyl or glycerin suppositories. 3. Bowel evacuation time was least for docusate sodium mini-enemas. 4. In terms of difficulty with evacuation, docusate sodium scored best in symptom reduction followed by, in descending order of efficacy, mineral oil enema, bisacodyl suppositories and glycerin suppositories.

Discussion

The effectiveness of the hydrogenated vegetable oil-based (HVB) bisacodyl suppositories compared to the polyethylene glycol-based (PGB) suppositories has often been examined. The total bowel care time with the polyethylene glycol-based suppository is often significantly less (Dunn & Galka 1994). House and Stiens (1997) compared the effectiveness of hydrogenated vegetable-based, polyethylene glycol-based and docusate glycerin (mini-enema) in subjects with upper motor neuron (UMN) lesions. Results showed a significant decrease in bowel care time using the PGB suppository and the mini-enema as compared with the HVB suppositories. Chemical rectal agents (suppositories) are used commonly by persons with SCI to maintain or enhance a successful bowel management program.