

WHAT'S THE METHOD MORE USED TO FUNCTION THE BOWEL IN PATIENTS DIAGNOSED WITH SPINA BIFIDA IN GERMANY?

Hypothesis / aims of study

This study was to identify the method used to function the bowel in patients diagnosed with spina bifida who use intermittent bladder catheterization in Germany.

Study design, materials and methods

This study is a quantitative, descriptive, observational and cross-sectional. The study was conducted in Germany between 2010 and 2011. Only neurogenic bowel data in German patients were analyzed. The data collection in Germany was conducted through an online questionnaire which allowed for data to be collected from different regions of the country. The target sample size was calculated using the Freeman formula for logistical regression and it was comprised of 100 German patients diagnosed with spina bifida. Data was collected using a survey questionnaire consisted of 39 items. The online questionnaire page had about 150 hits and of these 100 patients answered the questionnaire completely. Data collection took place over a period of about 60 days and was stopped when the goal of 100 complete questionnaires was reached. The study examined the variables in the German sample, including: difficulties with the intermittent catheterization and method used to function the bowel. However, these variables were not subject to comparison, and were only described. Data were analyzed using to absolute frequency and relative frequency respectively.

Results

The German participants were also asked about the resources used to empty the bowel, since fecal continence and bowel function are part of the context of vesicointestinal reeducation in the rehabilitation of patients with SB. There were 88 participants who answered this question (Table 1).

Table 1. Distribution of method used in emptying the bowel in German patients (n = 88)

Resources used	n	%
Rectal irrigation	26	29.5%
Digital rectal stimulation	24	27.3%
Toilet training	11	12.5%
Laxatives	11	12.5%
Suppository/mini-enema	10	11.4%
Intestinal/colon massage	5	5.7%
Other	1	1.1%
None	20	22.7%

As outlined in the previous table, the distribution of the German sample was different in relation to the methods used for emptying the bowel. For intestinal emptying, 29.5% of the German patients use rectal irrigation, 27.3% use digital rectal stimulation, 12.5% use toilet-training, 12.5% use laxatives, 11.4% use a suppository or mini-enema, 5.7% use intestinal or colonic massage, 1.1% use some other means, and 22.7% stated they do not use any means to aid their intestinal functioning.

Interpretation of results

More than 80% of MMC patients have changes in bowel function, being the intestinal constipation is a key cause of death in patients with spina bifida (3). And even with these alarming data, 22.7% of those with spina bifida do not perform any type of intestinal reeducation technique. In Germany, most of the patients used as intestinal emptying technique the rectal irrigation (29.5%) and digital rectal stimulation (27.3%). In Brazil this reality is different. In a study developed in children with cerebral palsy, who needed techniques for intestinal emptying, 84% of their caregivers reported that they performed some form of abdominal massage on the children, but incorrectly. After training the caregivers for intestinal reeducation of the patients, they maintained the technique of intestinal massage, perianal massage, and abdominal press, as the most used, because it was less invasive (2). Bowel management, along with bladder control and toilet use, are among the daily life activities that are more difficult for patients with spina bifida in adulthood. In light of this, considering the journey that patients with spina bifida follow to arrive at adult age, the goals for the future are essentially focussed on these individuals developing(1).

Concluding message

The regarding the method used in emptying the bowel in the present study contributes to the scarce National and International literature related to spina bifida. More health education programs are needed to strengthen the importance of care in the neurogenic bowel.

References

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2. Faleiros-Castro FS1, de Paula ED. Constipation in patients with quadriplegic cerebral palsy: intestinal reeducation using massage and a laxative diet. *Rev Esc Enferm USP*. 2013 Aug;47(4):836-42. doi: 10.1590/S0080-623420130000400010.
3. Clayton, D. B., Brock, J. W., Joseph, D. B. (2010). Urologic management of spina bifida. *Developmental disabilities research reviews*, 16(1), 88–95.

Disclosures

Funding: Katholischer Akademischer Ausländer-Dienst, KAAD, Alemanha. **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** In Germany, the research project was initially approved by the committee of professors at the School of Rehabilitation Sciences, University of Dortmund, and the board of directors of ASBH (Association of Spina Bifida and Hydrocephalus). For the collection of data during the pilot phase, the consent form for participation in scientific research were printed by the patient or person responsible and signed. **Helsinki:** Yes **Informed Consent:** Yes