

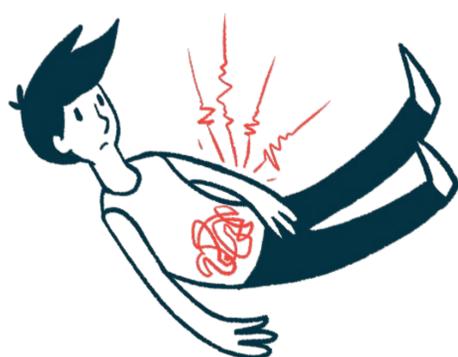
# CONSTRUCT VALIDITY OF THE IBS-QOL QUESTIONNAIRE IN SPINAL CORD INJURY (SCI) POPULATION

Priva Kohli<sup>1</sup>, Nhi Ha<sup>1</sup>, Veronica Stefania Montero Arcila<sup>1</sup>, Luis Alejandro Morales Ojeda<sup>1</sup>, Rita Jen<sup>1</sup>, Anibal De La Riva Rincon<sup>2</sup>, Laura Perez<sup>2</sup>, David Ginsberg<sup>1,2</sup>, Evgeniy Kreydin<sup>1,2</sup>, Aidin Abedi<sup>3</sup>

<sup>1</sup>University of Southern California, USC Institute of Urology, Los Angeles, CA, <sup>2</sup>Rancho Research Institute, Rancho Los Amigos Rehabilitation Center, Downey, CA, <sup>3</sup>University of Southern California, Department of Neurosurgery Keck School of Medicine, Los Angeles, CA

## BACKGROUND

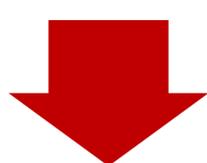
- Spinal cord injury patients have a high prevalence of both neurogenic **bladder** and neurogenic **bowel** dysfunction
- There is no comprehensive survey to assess the degree to which neurogenic **bowel** dysfunction impacts patients' quality of life
- Sought to validate IBS-QOL survey in SCI population



## Methodology

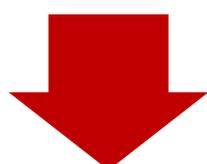
### Patient Recruitment

- 106 spinal cord injury patients were recruited from a large safety net hospital
- Demographic and medical data was abstracted from patients' electronic medical record



### Patient Surveys

- Patients completed 2 surveys:
  - Neurogenic Bowel Dysfunction Score- Short Form (NBDS)
  - Irritable Bowel Syndrome Quality of life Score (IBS-QOL)

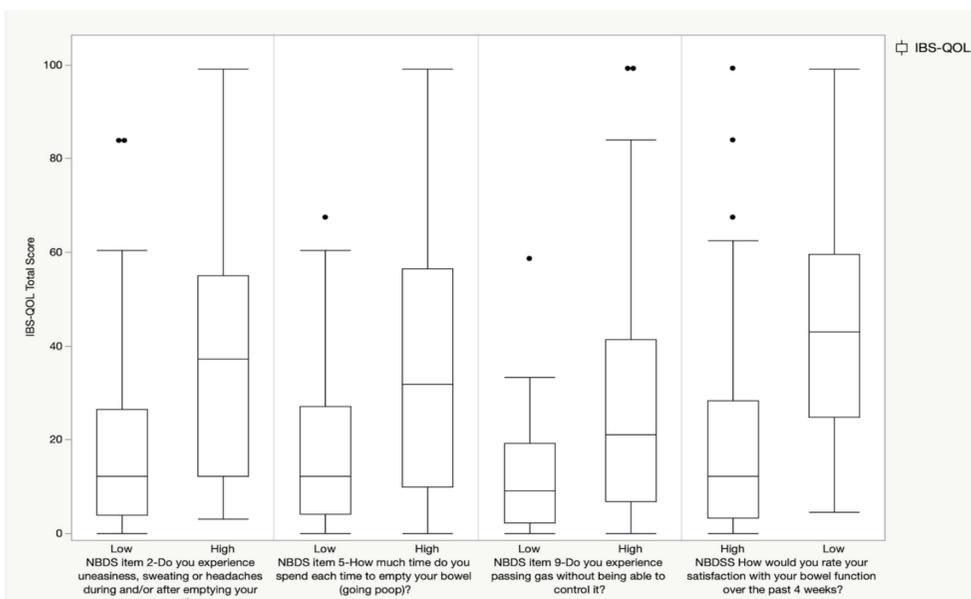


### Analysis

- Items of the Neurogenic Bowel Dysfunction Score (NBDS) were dichotomized
- Construct validity was assessed using the hypothesis testing method

## RESULTS

### IBS-QOL SCORES VS. NBDS SUBGROUPS



Comparison of Irritable Bowel Syndrome Quality of Life (IBS-QOL) total score across patient subgroups stratified based on the severity of bowel symptoms according to the Neurogenic Bowel Dysfunction Score (NBDS) items and overall satisfaction with bowel management. Higher values on IBS-QOL indicate worse QOL. Only statistically significant comparisons are shown. Dots represent outliers.

- One-hundred and six patients (n=82, 77 % male, mean age 45.3 ± 13.6 years) were recruited.
- Median time from injury was 13 years (IQR: 4.0-27.7).
- The median IBS-QOL total score was 15.9/100 (IQR: 4.55- 33.14).
- Sufficient construct validity to discriminate sub-groups of patients w/ severe bowel dysfunction in terms of uneasiness, sweating or headaches during bowel emptying, time spent of bowel emptying, flatus incontinence, and overall satisfaction with bowel function
- Differences related to frequency of bowel accidents and perianal issues were not significant

### NBDS DOMAINS VS IBS-QOL SCORES

NBDS DOMAIN	IBS-QOL CORRELATE
Freq. of bowel movement	Not Significant
Uneasiness during bowel movement	Significant
Medication for Constipation	Not Significant
Time needed for bowel movement	Significant
Digital Stimulation for Bowel	Not Significant
Bowel Accidents	Not Significant
Medications to prevent bowel accident	Not Significant
Uncontrollable gas	Significant
Perianal problems	Not Significant
Satisfaction with bowel function	Significant

## CONCLUSIONS

- We demonstrated the construct validity of IBS-QOL for assessment of **bowel**-related QOL in SCI
- This measure provides a comprehensive and domain-specific understanding of **bowel**-related QOL following SCI

### Future Directions:

- Further studies are needed to assess its reliability, responsiveness, and generalizability across different patient populations.
- Providing face validity for the IBS-QOL survey via patient and expert interviews to discuss the comprehensiveness and applicability of overall survey to SCI patients.

## REFERENCES AND ACKNOWLEDGEMENTS

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