

Assessing the Self-Rating Scale Item as a Measure for Lactulose Adherence

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Background/Objective:

Hepatic encephalopathy (HE) is a defining complication of end-stage liver disease. The standard treatment is lactulose, but adherence is difficult due to complex dosing regimens and side effects. We adapted a single item self-reported adherence measure - the Self-Rating Scale Item (SRSI) - for lactulose use and examined its relationship with clinical events, cognition, and quality of life.

Methods:

We performed a cross-sectional study of patients with cirrhosis and HE seen at Indiana University Hospital 5/31/2023-7/14/2023. Clinical history and demographic information were collected through electronic health records and patient interviews. Patients provided the SRSI, which reflects their self-perceived ability to take lactulose, bowel movement frequency, perception of missing doses, and quality of life (PROMIS-29+2). Cognition was measured using the Animal Naming Test (ANT). The relationship between the SRSI and other measures was assessed.

Results:

42 patients met eligibility criteria and enrolled. The median age was 59, and 55% were female. Patients were divided across SRSI categories: ≤good, very good, and excellent. Patients with better adherence were more likely to have ascites, but other demographics were similar between groups. Ascites was present in 43%, 64%, and 93% of ≤good, very good, and excellent categories, respectively. A higher SRSI score was associated with fewer missed doses and more days achieving bowel movement targets. 79% in the ≤good category skipped lactulose doses compared to 29% and 21% in very good and excellent groups. SRSI was not associated with HE-related hospitalizations or ANT. Higher SRSI was associated with improved sleep and cognitive function, with a trend towards decreased fatigue and pain.

Conclusion/Potential Impact:

The SRSI is associated with other measures of lactulose adherence and quality of life and may be a promising tool to measure lactulose adherence. Adopting the SRSI may be a useful way to improve lactulose dosing, adherence, and health outcomes.