7. Prevalence, Severity and Impact of Fecal Incontinence in Systemic Sclerosis: Preliminary Results of a Cross-Sectional Study.

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Background: Fecal incontinence (FI) is a complication of systemic sclerosis (SSc), but its exact epidemiology and optimal management remain unknown. The primary aim of this study was to establish the prevalence and severity of FI in SSc. Secondary aims were to determine the association between FI and constipation, diarrhea, small intestinal bacterial overgrowth (SIBO) and other predictors of FI, and to determine the impact of FI on health-related quality of life (HRQoL) in SSc.

Methods: A cross-sectional study was initiated in March 2014 in three sites participating in the Canadian Scleroderma Research Group (CSRG; Sherbrooke, Montreal and Hamilton). In addition to the standardized data collection protocol, participants were asked to complete three validated questionnaires: Bristol stool scale (BSS; measures consistency of stool from 1, being hardest, to 7, being completely liquid stool), Jorge-Wexner score (JWS; FI severity score ranging from 0-20, with 20 being most severe), and Fecal Incontinence Quality of Life scale (FIQOL; measuring 4 domains: lifestyle, coping/behaviour, depression/self perception, embarrassment). The Rome III criteria were used to define constipation. Descriptive statistics and associations between the JWS and clinical variables were computed. P-values ≤0.05 were considered statistically significant.

Results: As of August 2014, 70 subjects had been recruited. Mean age was 61.2±11.4 and 82.9% of subjects were women. The mean BSS was 3.0 (2.0-4.0), 30(43.5%) subjects met the Rome III criteria for constipation and 14 (20.0%) had been treated with antibiotics for SIBO since disease onset. According to the JWS, 17 (25.0%) subjects had FI; among them 10 (14.7%) were mild (score 5-9) and 7 (10.3%) moderate to severe (score ≥10).
 The JWS was significantly higher in patients with associated constipation (p=0.004), urinary incontinence (p=0.00002) and past history of forceps use (p=0.015). No significant relation was found between the JWS and the BSS (p=0.101), use of antibiotics for SIBO (p=0.757), and other predictors of FI including disease duration (p=0.138) and disease type (p=0.215).
 There were strong correlations between the JWS and 3 domains of the FIQOL: lifestyle (p=0.001), coping/behaviour (p=0.0003) and embarrassment (p=0.003). The correlation was not significant with the depression/self perception domain (p=0.207).

Conclusion: In this multi-site study, FI was common and often severe in SSc. Constipation, but neither diarrhea nor malabsorption, was significantly associated with FI. FI had a strong negative impact on HRQoL. A larger study is underway to obtain more robust estimates. These data will inform the design of future interventions aimed at improving this serious complication of SSc.