Fecal Incontinence in Inflammatory Bowel Disease

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BACKGROUND
- Fecal incontinence (FI) is the involuntary loss of liquid or solid stool
- FI is reported in approximately 2-15% of the general population and between 20-73% of patients with inflammatory bowel disease (IBD)
- The factors that lead to the development of FI in patients with IBD have not yet been clearly defined.

OBJECTIVE
- To determine the prevalence and risk factors for FI in IBD by using both patient-reported outcome data and objective measures from patients enrolled in a research registry.

METHODS
- A retrospective review of clinical data collected prospectively as a part of the Study of a Prospective Adult Research Cohort (SPARC) registry from the University of Maryland site
- Inclusion criteria were adults with ulcerative colitis (UC), Crohn’s disease (CD), and indeterminate colitis (IC) who answered the questions: “During the last month, have you had leakage of stool while sleeping and/or while awake?”
- Exclusion criteria were the presence of a current ostomy, history of ileal pouch-anal anastomosis, and patients missing data regarding disease type or characterization
- Disease severity was determined using the short Crohn’s Disease Activity Index (sCDAI) or 9-point Ulcerative Colitis Disease Activity Index (UCDAI)
- Analysis consisted of descriptive statistics to describe the cohort, comparative analysis using Chi Square and Fischer Exact analysis, and logistic regression

RESULTS
- 500 patients were included: cohort characteristics are listed in Table 1
- FI was reported in a total of 71 (14%) patients: 50 (14%) with CD, 20 (14%) with UC, 1 (13%) with IC
- UC was limited to the rectum in 40 (27.4%), extensive in 16 (11.1%), and pan-colonic in 74 (51.4%) patients, and unknown in 4.9 (7%) patients
- CD was inflammatory in 131 (37.3%), penetrating in 102 (29.4%), and obstructing in 110 (31.7%), and unknown in 4 (1.1%) patients
- Disease location was ileal in 103 (29.6%), colonic in 54 (15.6%), ileocolonic in 178 (51.3%), and isolated to the upper tract in 2 (0.6%) patients
- About 1 out of 7 patients with IBD will develop FI
- About 8% of patients with CD report FI even in remission
- In a logistic regression model including patients with UC and CD, patients with an age >50 years were 1.7 times more likely to have FI than patients with UC, patients with an age >50 years were 1.7 times more likely to have FI than patients with an age <50 years-old (p=0.037)
- Patients with UC and CD were 1.4 times more likely to have FI than patients without urgency controlling for other significant variables
- On multivariable analysis limited to patients with CD only, patients were significantly more likely to have FI if they were greater than 50 years old, had fecal urgency, liquid stools, a higher sCDAI score, and a worse physician global assessment (p<0.05). They were significantly less likely to have FI if they were in symptomatic remission (p<0.05).
- For patients with UC only, patients were significantly more likely to have FI if they had fecal urgency, liquid stools, a higher sCDAI score, and a worse physician global assessment. They were significantly less likely to have FI if they were in symptomatic remission.
- 19 (8%) of patients with CD and 2 (2%) of patients with UC reported FI despite being in clinical remission

CONCLUSIONS
- About 1 out of 7 patients with IBD will develop FI.
- FI is more common in patients over the age of 50 years and in those with active disease.
- About 8% of patients with CD report FI even in remission.
- Our results show a significant unmet need in management of FI in IBD.