

Fecal Incontinence Following Obstetrical Anal Sphincter Laceration is Associated with Frequent Loose Stools

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Background: In the Childbirth and Pelvic Floor Symptoms (CAPS) study, post-partum fecal incontinence (FI) was twice as likely in women with third or fourth degree sphincter lacerations compared to women who delivered vaginally without a recognized sphincter laceration. In other studies, diarrhea was shown to be a risk factor for FI, and antidiarrheal drugs were reported to reduce the severity of diarrhea-associated FI.

Aims: To determine (1) whether chronic diarrhea is associated with an increased risk of FI following sphincter laceration and (2) whether chronic constipation reduces this risk.

Methods: Women from the CAPS study with 3rd or 4th degree sphincter lacerations who reported urgency to defecate or accidental loss of flatus, solid or liquid stool, or mucus at 6 weeks (n=259) and 6 months (n=218) were included in this study. Diarrhea was assessed by asking women whether their stools were loose or watery 0%, 25%, 50%, 75%, or 100% of the time, and chronic diarrhea was defined by a report of loose or watery stools 75% or 100% of the time. Women were also asked how often their stools were hard or like pebbles, and chronic constipation was defined by reports of 75% or 100%. Accidental loss of solid or liquid stool or mucus, but not flatus alone, defined FI. However, the severity of FI was assessed using the Fecal Incontinence Severity Index (FISI) which includes incontinence for gas.

Results: Average age of participants was 28 years. At 6 weeks, 60% of patients with chronic diarrhea had FI compared to 34.8% of those without chronic diarrhea (OR=2.81; CI, 1.96, 3.66). At 6 months, there were similar trends but they were nonsignificant: 36.8% vs. 25.4%; OR=1.72 (CI, 0.73, 2.70). The frequency of loose or watery stools was significantly correlated with the FISI severity score both at 6 weeks ($\rho=.28$; $p=.0002$) and 6 months ($\rho=.14$; $p=.03$). Hard stools were not protective (contrary to prediction), and in fact tended to be associated with an increased risk for FI at 6 weeks: 56.7% vs. 34.5%; OR=1.66 (CI, 1.07, 2.25).

Conclusions: The risk of FI following obstetrical laceration is 2-3 times greater if women have frequent loose stools. Recognizing this added risk factor and individualizing the bowel regimen to keep the stool soft, but prevent diarrhea may reduce the incidence and severity of FI associated with sphincter laceration.

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