

**Abstract Title: A prospective, randomized control trial evaluating the impact of backfill vs. spontaneous voiding trial on discharge time for gynecologic oncology patients undergoing laparoscopic hysterectomy**

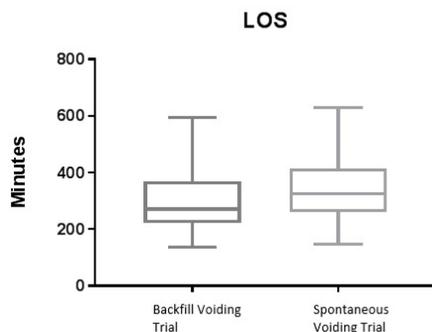
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**Objectives:** Same day discharge (SDD) is feasible following laparoscopic hysterectomy (TLH) in gynecologic oncology patients resulting in low re-admission rates and post-operative complications. As the cost of care increases, SDD also results in a reduced cost compared to overnight and multi-day admission [Schiavone et al]. Backfill voiding trials have been described in the urogynecologic literature showing a reduction in discharge with a catheter following vaginal surgery. The aim of this study is to determine if performing a backfill voiding trial leads to expedited discharge following laparoscopic hysterectomy in gynecologic oncology patients.

**Study Design:** Subjects scheduled for SDD TLH were enrolled and randomized to a backfill voiding trial or a spontaneous voiding trial following surgery. To detect a 30-minute difference in discharge time with 80% power, 117 patients were required to be enrolled. Voiding trials were performed per hospital protocol. The primary outcome was length of stay. Secondary outcomes included time to void, catheter replacement, admission to the extended recovery unit (ERU), and post-operative complications and re-admission. Clinical and follow up data were obtained from the longitudinal medical record.

**Results:** 121 patients were randomized: 60 to a backfill voiding trial and 61 to a spontaneous voiding trial. There was a statistically significant reduction in median length of stay for patients undergoing backfill voiding trial vs. spontaneous voiding trial (271.5 minutes vs. 329 minutes,  $p = 0.015$ ). There was also a significant reduction in median time to void with the backfill voiding trial vs. spontaneous (30 minutes vs. 289 minutes,  $p < 0.001$ ). There was no difference in median pain score (2), catheter replacement, or admission to ERU between the two groups.



**Conclusions:** There is a significant reduction in time to void and total length of stay in patients randomized to a backfill voiding trial following TLH with no increased patient discomfort. While the numbers of post-operative admissions were low and likely underpowered to detect a difference in admission rate, these data will help to streamline post-operative care and translate into a reduction in cost for SDD gynecologic oncology patients.