Improved Postoperative Pain Control by Addition of Oral Phenazopyridine before Total Laparoscopic Hysterectomy

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Objective: To determine if the addition of preoperative oral phenazopyridine reduces post-operative pain and narcotic use.

Design: Retrospective chart review.

Settings: Four academic affiliated and community-based hospitals.

Patients: Patients undergoing total laparoscopic hysterectomy (TLH) for benign gynecologic indications performed by a single surgeon from December 3rd, 2013 to June 6th, 2017.

Interventions: Addition of oral phenazopyridine in the preoperative protocols for TLH.

Measurements/Results: The control preoperative pain regimen included oral acetaminophen, gabapentin, and a non-steroidal anti-inflammatory drug and was given to 316 patients. Starting in 05/03/2016, oral phenazopyridine was added to the combination, and given to 125 patients. Average surgical durations were shorter by 10.4 minutes for patients receiving the drug (p < .05) and cystoscopy was performed more often for patients receiving phenazopyridine (45% vs. 19%, p < .0001), but other surgical parameters were similar. The addition of preoperative phenazopyridine was associated with a significant reduction in post-operative injectable narcotic use (p = .041), a trend of reduced total (oral and injectable) narcotics use (p = .079) among all patients, and a significant reduction of total narcotic use among those patients receiving cystoscopy (p = .032).

Conclusions: Oral preoperative phenazopyridine significantly reduces narcotic use for patients receiving cystoscopy and trends a reduction in narcotics for all hysterectomy patients.