

# Is same-day discharge feasible and safe for women undergoing vaginal hysterectomy?

**Yes.** This descriptive study and review of clinical outcomes in 1,071 women undergoing vaginal hysterectomy demonstrated that good perioperative outcomes are achievable with the vaginal approach, and patients can be safely dismissed within 12 hours following a well-outlined protocol.

Zakaria MA, Levy BS. Outpatient vaginal hysterectomy. Optimizing perioperative management for same-day discharge. Obstet Gynecol. 2012;120(6):1355–1361.

### **EXPERT COMMENTARY**

**Rosanne M. Kho, MD,** Associate Professor and MIGS Fellowship Program Director, Department of Surgical and Clinical Gynecology, Mayo Clinic, Phoenix, Arizona.

Vaginal hysterectomy has a superior profile in terms of morbidity, safety, and cost, compared with other approaches to hysterectomy for benign disease. Despite this standing, vaginal hysterectomy is performed in a minority of cases. As the rates of other minimally invasive approaches—laparoscopic and robotic—have increased in the United States, the vaginal route has declined from 28% in 1998 to 20% in 2010.<sup>1,2</sup> In fact, a large majority (85%) of gynecologists in the United States perform fewer than five vaginal hysterectomies a year.<sup>3</sup>

The concept of same-day discharge after hysterectomy is not new. Previously published studies, including one from an author of this study,<sup>4</sup> have shown that discharging patients 12 to 24 hours after laparoscopic or vaginal hysterectomy is feasible. However, outpatient hysterectomy generally has not been adopted to the same extent as outpatient cholecystectomy in the field of general surgery.

At a time of cost-containment and

The author reports no financial relationships relevant to this article

declining medical reimbursements, outpatient hysterectomy has the potential to affect the health-care economic landscape in a significant manner.

# **Details of the series**

Zakaria and Levy describe a consecutive series of 1,071 women who underwent vaginal hysterectomy (performed by a single surgeon) according to a well-outlined outpatient protocol. Participants underwent preoperative counseling and evidence-based interventions

# WHAT THIS EVIDENCE MEANS FOR PRACTICE

Most gynecologic practitioners continue to admit patients overnight following hysterectomy. This study demonstrates that same-day discharge is feasible and safe. It also highlights other routinely employed practices, such as the use of an indwelling catheter and liberal administration of intravenous narcotics postoperatively, that may adversely affect a patient's recovery.

I strongly recommend that readers refer to this study and consider many of the techniques it describes to minimize postoperative pain and nausea in patients undergoing hysterectomy. Even when a patient is admitted overnight, techniques to minimize postoperative discomfort should be considered.

>> ROSANNE M. KHO, MD



Same-day discharge was accomplished in 96% of patients (medications, hydration) before, during, and after surgery to preempt postoperative pain and nausea.

Median operative time was 34 minutes (range, 17–210 minutes), and median estimated blood loss was 45 mL (range, 5–800 mL). Median uterine weight was 160 g (range, 25–1,380 g).

Following the protocol, same-day discharge (ie, within 12 hours) was accomplished in 96% of patients. A small number (41 women, or approximately 4%) required overnight hospitalization for pain, nausea, or the need to travel a significant distance to return to their home. Five patients required readmission or emergency room evaluation within the first postoperative month due to nausea and vomiting, abdominal pain, fever, pulmonary embolus, or vesicovaginal fistula.

# Strengths and limitations

Besides demonstrating that patients can be discharged early, Zakaria and Levy also point out that even traditionally "difficult" vaginal cases—for example, nulliparous women (18% of cases), women with a history of cesarean

delivery or pelvic surgery (20% of cases), and patients with uteri larger than 250 g (30% of cases)—can be accomplished vaginally. These cases all were performed using a vessel-sealing device over the 10 years of the series.

Single-surgeon and selection bias may limit the generalizability and conclusions of this study. Future investigations using a comparative cohort (with an inpatient arm) and employing validated measures to evaluate outcomes such as postoperative pain, total narcotic use, return to normal activity, and patient satisfaction, also would be helpful. In addition, it would be beneficial to determine whether the same protocol would be applicable to patients undergoing other hysterectomy approaches. <sup>9</sup>

## References

- Farquhar CM, Steiner CA. Hysterectomy rates in the United States, 1990–1997. Obstet Gynecol. 2002;99(2):229– 234
- Wright JD, Ananth CV, Lewin SN, et al. Robotically assisted vs laparoscopic hysterectomy among women with benign gynecologic disease. JAMA. 2013;309(7):689–698.
- Rogo-Gupta LJ, Lewin SN, Kim JH, et al. The effect of surgeon volume on outcomes and resource use for vaginal hysterectomy. Obstet Gynecol. 2010;116(6):1341–1347.
- Levy BS, Luciano DE, Emery LL. Outpatient vaginal hysterectomy is safe for patients and reduces institutional cost. J Minim Invasive Gynecol. 2005;12(6):494–501.

# INDEX OF ADVERTISERS **Applied Medical** LabCorp Clinical Guideline Management for Cervical Cancer and STD Screening **Bayer Healthcare** Skyla ...... PP 28-31 Conceptus Inc. Laclede. Inc. Cook Medical **Ther-Rx Coporation** Cooper Surgical Upsher-Smith Laboratories, Inc. Advincula Arch ......P 5 Nexa Family of Vitamins......PP 19-20 **Duchesnay USA** Watson Diclegis...... PP 7-8 Hologic