Robotic Procedure Shorter, Has Less Blood Loss

**ARTICLES BY**

Michele G. Sullivan

Kissimme, Fla. — Robotic-assisted laparoscopic hysterectomy is a safe alternative to total laparoscopic hysterectomy, offering the advantages of shorter operating room time, significantly less blood loss, and fewer conversions to open surgery, according to Dr. Khaled Sakhel.

“The room time in our study was significantly shorter in the robotic-assisted group, despite the fact that the induction time was 6 minutes longer,” he said at the annual meeting of the AAGL. “The surgeon was able to make up that lost time and more,” leaving the operating room a mean of 10 minutes sooner than surgeons who performed a total laparoscopic procedure.

Dr. Sakhel reported a prospective comparative study conducted while he was at Michigan State University, East Lansing; he has since moved to Eastern Medical School, Norfolk, Va.

The cohort consisted of 136 women (mean age 46 years) who underwent total laparoscopic hysterectomy or robotic-assisted laparoscopic hysterectomy at two Michigan hospitals. Patients were not randomized; instead, insurance companies decided which hospital would be used.

Group 1 consisted of 73 women who were assigned to a hospital that had a robotic surgical system; the 63 patients in group 2 were assigned to a hospital without such a system. The patients’ mean weight was 180 pounds. There were no significant demographic or diagnostic differences between the two groups. A single surgeon performed all the procedures.

The study examined three time outcomes in addition to clinical outcomes. Total room time was defined as “wheels in, wheels out.” Induction time was defined as “wheels in to incision time.” Procedure time was defined as incision to closure time.

Total room time was significantly less in the robotic group (125 vs. 135 minutes). Induction time was significantly longer in the robotic group (27 vs. 21 minutes), because of the additional time in docking the robotic system. Procedure time was significantly shorter in the robotic group (82 vs. 108 minutes).

**Overall Sensitivity for Endometrial Polyps 89% With Color Doppler**

Kissimme, Fla. — Color Doppler imaging is highly sensitive for endometrial polyps, because it can identify the feeding vessel that allows the polyp to grow, according to Dr. Pauline L. Chang.

A retrospective study of 74 women found that color Doppler had an overall sensitivity of 89% and a positive predictive value of 80% for endometrial polyps. Among only premenopausal women, the sensitivity was even better at 96%, she said at the annual meeting of the AAGL.

In fact, said Dr. Chang of Stanford (Calif.) University, the test’s diagnostic values are so good that a positive color Doppler should eliminate the need for second-line testing.

“For women with a positive transvaginal color Doppler, additional imaging, such as saline-infusion sonohysterography, is not necessary for confirmation before proceeding to definitive management with hysterectomy,” she said.

All 74 of the women in the study had undergone a transvaginal pelvic sonogram that suggested endometrial polyps. However, color Doppler imaging revealed vascularity in 64 patients, and hysteroscopy confirmed this finding in 51 of them.

There were 13 false-positive results, which hysteroscopy confirmed as normal in five women. Fibroids in seven, and a dense adhesion in one. Thus, Dr. Chang said, “vascularity on Doppler imaging had a sensitivity of 89.5% and a positive predictive value of 80% for detection of endometrial polyps.”

Dr. Chang then divided the group into premenopausal and postmenopausal women. For the 61 premenopausal women who had evidence of endometrial polyps on transvaginal ultrasound, color Doppler found vascularity in 55; there were 11 false positives confirmed by hysteroscopy. For this group, the sensitivity of color Doppler for endometrial polyps was 96%, and the positive predictive value was 80%.

In the group of 13 menopausal women, color Doppler identified 9 with vascular polyps; there were two false positives, Dr. Chang reported. For the menopausal group, Doppler had a sensitivity of 67% and a 78% positive predictive value.

**Disclosures:** Dr. Chang said she had no relevant financial disclosures.

---

*[Graph showing Robotic vs. Total Hysterectomy Procedure Time (minutes)*]

*Source: Dr. Sakhel*

**VITALS**

 chronological vascular injury in the higher-weight group, while two such injuries occurred in the lower-weight group; again, this was not a significant difference. There were significant differences in conversion to open surgery, postoperative vaginal cuff complications, and unplanned readmission within 60 days, reoperation, or length of hospital stay.

“Although women with a BMI of 35 kg/m² or higher had a significantly longer operative time, the overall perioperative complications and conversion to laparotomy were low and similar to those among women with a BMI less than 35,” Dr. Kim said.

**Disclosures:** Dr. Kim said she had no conflicts of interest to disclose.

---

**Polyps 89% With Color Doppler**

*[Image showing grayscale ultrasound suggesting an endometrial polyp.]*

*Dr. Chang/Dr. Sakhel (Detroit)*

**VITALS**

Color Doppler reveals vascularity, increasing the suspicion of a polyp.