

Cochrane Review Favors Vaginal Hysterectomy

The vaginal approach meant shorter hospital stays and quicker return to normal activities.

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Contributing Writer

Vaginal rather than abdominal hysterectomy should be performed "whenever technically feasible" to reduce potential complications and to speed hospital discharge and patients' return to normal activities, according to a new review of randomized controlled trials that have compared hysterectomy techniques.

"The many advantages demonstrated from avoiding abdominal hysterectomy ... suggest that [it] should be avoided if it is possible and safe to do so," wrote Neil Johnson, M.D., of the University of Auckland in New Zealand, and his colleagues.

The investigators also concluded that when vaginal hysterectomy is not possible, laparoscopic hysterectomy has advantages over abdominal hysterectomy, including a speedier recovery.

These advantages can be "offset," however, by longer operating times and more urinary tract injuries, the investigators said.

The "systematic evidence review" of surgical approach to hysterectomy for benign gynecologic disease was conducted by the Cochrane Collabora-

tion, an international organization that evaluates medical research and draws evidence-based conclusions about medical practice.

Leading experts in the United States predicted that—no matter how significant and informative—the conclusions of the metaanalysis will likely fall flat at home, particularly as they concern the issue of vaginal versus abdominal hysterectomy.

Physicians' choice of approach for hysterectomy is so tightly tied with experience and with physicians' "comfort" level that the predominance of the abdominal approach in the United States is unlikely to change, they said.

"I don't think there's ever been an economic incentive for one route over another. It's a training and comfort issue," said Thomas Stovall, M.D., president of the Society of Gynecologic Surgeons. "I think we'll continue to see [choices] based on practice patterns and training."

According to a 2002 report on hysterectomy issued by the Centers for Disease Control and Prevention—the most recent surveillance conducted—more than 60% of hysterectomies performed in the United States between 1994 and 1999 were abdominal. "I don't think the figures are that much different today," Dr. Stovall said.

controlled trials that compared hysterectomy approaches in almost 3,650 women, the majority of whom were 41-50 years of age.

All but 7 of the trials were single-center trials (including two from the United States), and the majority of the 27 trials compared various types of laparoscopic surgery with either vaginal or abdominal hysterectomy. Three trials compared all three approaches, and two trials (published in 2002 and 2003) compared vaginal with abdominal hysterectomy.

The investigators found that, compared with abdominal surgery, vaginal hysterectomy meant a shorter stay in the hospital (by approximately 1 day), a quicker return to normal activities (10 vs. 13 days), and fewer infections and febrile episodes (odds ratio 0.42).

Laparoscopic hysterectomy (various types of laparoscopic surgery were pooled together) also had advantages over abdominal hysterectomy: less intraoperative blood loss, a smaller drop in hemoglobin level, a similarly shorter hospital stay and quicker return to normal activity, fewer wound or abdominal wall infections, and fewer unspecified infections or febrile episodes.

Laparoscopic operations were more likely than abdominal hysterectomies to result in urinary tract injuries, however (OR 2.61). And in general, they were longer operations (14 vs. 11 minutes). (The exception was laparoscopically assisted vaginal hysterectomy without uterine artery ligation; these operations were significantly shorter than abdominal hysterectomy.)

When compared with traditional vaginal hysterectomy, laparoscopic approaches fell short in the metaanalysis, leaving unanswered the question of whether laparoscopic procedures should be performed when vaginal hysterectomies are achievable, the investigators said (Cochrane Database Syst. Rev. 2005 [1]:CD003677.DOI:10.1002/14651858.CD003677.pub2).

There were no apparent benefits of laparoscopic hysterectomy over the vaginal approach; the speed of patient recovery and other issues were similar, and there was no statistically significant difference in the rate of urinary tract injuries. Laparoscopic procedures took longer (49 vs. 42 minutes), however.

The introduction of laparoscopic techniques into gynecologic training has been beneficial in that it has increased "surgeons' confidence and skill with vaginal surgery, thus making vaginal hysterectomy a more feasible option for many," they said.

Such a happening has yet to play out in the United States, however, said Alan

Johns, M.D., past president of the Society of Reproductive Surgeons and the American Association of Gynecologic Laparoscopists.

"The skill level of the gynecologic surgeon has actually dropped dramatically," said Dr. Johns, who practices in Fort Worth, Tex. "The average graduate has not done enough vaginal hysterectomy ... and laparoscopic skills are not taught in the vast majority of residency programs." Patients also don't demand alternatives to traditional abdominal surgery, he said.

According to the 2002 CDC study, rates of laparoscopically assisted vaginal hysterectomies more than doubled between 1994 and 1999, from 13% of all vaginal hysterectomies to 28%. The overall rate of vaginal hysterectomy remained stable, however.

David Barlow, M.D., a coinvestigator of the Cochrane review and executive dean of medicine at the University of Glasgow in Scotland, said that most surgeons in the United Kingdom, who are paid the same regardless of which approach is employed, perform abdominal hysterectomies and that "few" surgeons are specially trained in laparoscopic approaches.

The risk of urinary tract injury during laparoscopic operations was "not surprising" and, although it was statistically significant, "it was not that high." Dr. Barlow added, that these findings need to be conclusively proven through more study and trial data.

It's also still unclear whether total laparoscopic hysterectomy has any benefits or harms over other forms of laparoscopic hysterectomy, he and his coinvestigators said in the review.

Data on long-term outcomes were "sparse" in the trials that were included in the review, said Dr. Barlow and Dr. Johns and their colleagues in the review.

Future trials should report on outcomes such as long-term urinary, bowel, and sexual function, as well as the occurrence of fistulae, they added.

Dr. Stovall, clinical professor of obstetrics and gynecology at the University of Tennessee in Memphis, said that interpreting the review is difficult because trials to date have not set and adequately controlled for indications

and criteria for various approaches to hysterectomy.

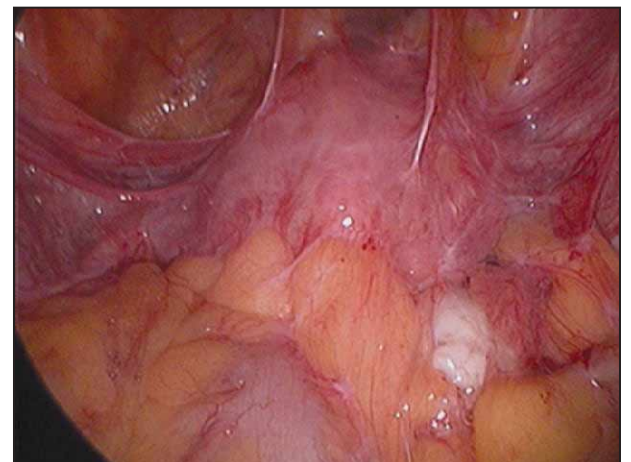
"It all comes down to the issue of patient selection, indications, and inclusion and exclusion criteria" for particular approaches, he said.

"These are somewhat subjective decisions" in clinical practice, but ideally, investigators would control for these factors in future trials, Dr. Stovall added.

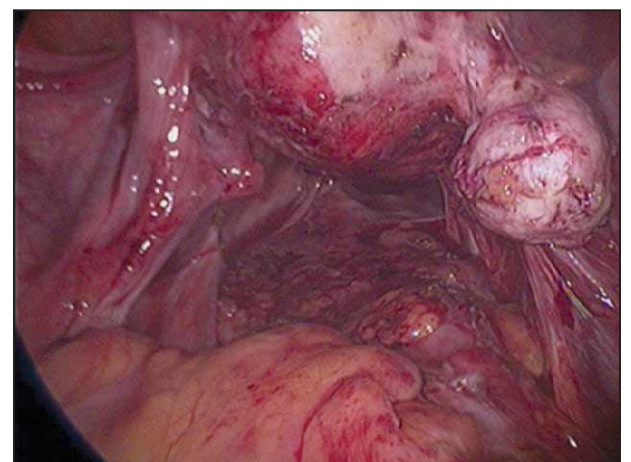
With long-term follow-up, "I don't think we'll see any difference in outcomes for one approach versus another."

Dr. Barlow emphasized, however, the importance of short-term patient recovery.

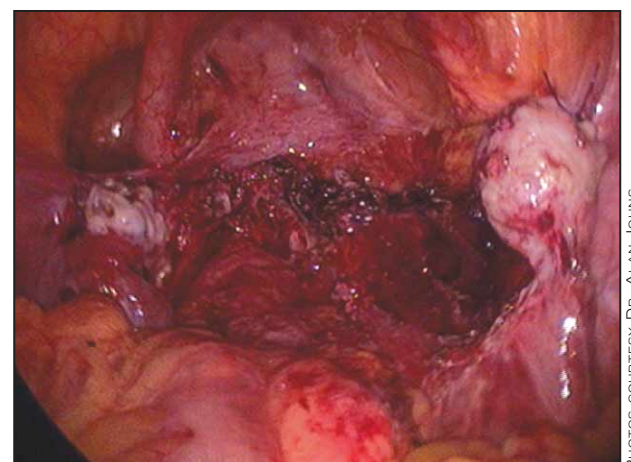
"What this paper is saying—a main message—is that patients are home a day earlier on average [with vaginal hysterectomy] and return to normal quicker. Patients like speedier recoveries," he said. ■



In this preoperative view, the uterus and ovaries are completely encased in adhesions from prior surgeries; only the fundus and anterior uterus are visible.



Using laparoscopic techniques, the uterus and ovaries have been dissected free, allowing the uterus to be removed vaginally.



The laparoscopic-assisted vaginal hysterectomy has been completed, and the ovaries have been left in place.