Open Surgery Safer than Minimally Invasive Approach for Early-Stage Cervical Cancer

Each year, about 13,000 women in the U.S. are diagnosed with cervical cancer. Most women with early-stage disease are treated with radical hysterectomy, which was largely performed using an abdominal incision until 2006, when some surgeons began adopting minimally invasive laparoscopic and robotic surgery. “There was a good rationale for this trend,” says Jason D. Wright, MD, Chief of Gynecologic Oncology at NewYork-Presbyterian/Columbia University Irving Medical Center, and Associate Professor of Obstetrics and Gynecology at Columbia University Vagelos College of Physicians and Surgeons. “Studies had shown that for most cancers, outcomes with less invasive surgery are comparable to open surgery, with the added benefit of fewer short-term postoperative complications.”

But Dr. Wright and his colleagues began to suspect that minimally invasive radical hysterectomies might not be as safe as open surgery. In an analysis of data from throughout the United States, they noted that survival for women undergoing radical hysterectomy for cervical cancer remained relatively constant until about 2006. “Survival began to decrease after that — exactly the same time that some surgeons began performing minimally invasive hysterectomies,” he says.

Now, a study by Dr. Wright and his colleagues has shown that women with early-stage cervical cancer who underwent minimally invasive hysterectomy had a 65 percent higher risk of death compared to those who had open surgery. The study, which belies...
Dr. Laura E. Riley New Chair of Obstetrics and Gynecology at Weill Cornell Medicine

(continued from page 1)

the Department of Obstetrics and Gynecology in recruiting and nurturing top talent, introducing clinical and research innovations, and educating the next generation of physicians who will promote women’s health.”

“For me, this is a dream come true,” says Dr. Riley. “Weill Cornell Medicine and NewYork-Presbyterian provide outstanding care. This role gives me an opportunity to build an even more exceptional clinical service and mentor junior faculty as they progress in their careers. As an underrepresented minority physician-leader, it demonstrates that there are no limits to advancing in medicine.”

The Department of Obstetrics and Gynecology encompasses the divisions of General Ob/Gyn, Benign Gynecology, Gynecologic Oncology, Maternal-Fetal Medicine, Urogynecology, Ob/Gyn Ultrasound, and Antepartum Fetal Testing, and collaborates closely with the Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine. Dr. Riley is committed to building upon the department’s reputation of clinical excellence while shepherding it into the next stage of innovation in women’s healthcare delivery.

A Multidimensional Role

Dr. Riley will also capitalize on clinical care and research opportunities created by the expansion of NewYork-Presbyterian and Weill Cornell Medicine into Lower Manhattan, Brooklyn, and Queens. With the goal of establishing an integrated obstetrics and gynecology service, she will help to build upon the care offered at NewYork-Presbyterian Lower Manhattan Hospital, NewYork-Presbyterian Brooklyn Methodist Hospital, and NewYork-Presbyterian Queens so that it meets the highest standards and that the diverse populations they serve have optimal experiences and outcomes.

“These campuses also offer a huge opportunity to conduct research,” says Dr. Riley. “Having some 8,000 deliveries will allow us to investigate clinical outcomes in a meaningful way that can transform women’s healthcare for the future.”

About Dr. Riley

A Boston native, Dr. Riley is a board-certified maternal-fetal obstetrician with expertise in high risk pregnancies, particularly those with infectious disease complications. Her research focuses on infection and the causes of fever during labor, as well as the utilization of the influenza vaccine in pregnant women. She also works with the Centers for Disease Control and Prevention, the U.S. Department of Health and Human Services, and the American College of Obstetrics and Gynecology to develop practice guidelines for pregnancy care of women with Group B strep, Zika, Ebola, and influenza viruses.

Dr. Riley has 30 original studies published in peer-reviewed journals such as *Obstetrics & Gynecology*, the *American Journal of Obstetrics & Gynecology*, and the *American Journal of Preventive Medicine*, and she has contributed 19 book chapters and monographs. Dr. Riley has also authored two books on pregnancy for consumers, *You and Your Baby: Pregnancy and You and Your Baby: Healthy Eating During Pregnancy*.

Dr. Riley has been recognized with several awards and honors, including the AK Goodman Faculty Mentoring Award and the Brian McGovern Award for Clinical Excellence from Massachusetts General Hospital. She has authored numerous guidelines providing standards of care for obstetrician/gynecologists in the United States in her role as chair of the American College of Obstetricians and Gynecologists’ Immunization Expert Workgroup, as well as its Committee on Obstetric Practice. She is also the past president of the Society for Maternal-Fetal Medicine.

Dr. Riley received her BA degree in biology from Harvard University and her medical degree from the University of Pittsburgh School of Medicine. Dr. Riley remained at the University of Pittsburgh for her residency in obstetrics and gynecology before completing a fellowship in maternal-fetal medicine at Brigham and Women’s Hospital. She then began a fellowship in infectious disease at Boston University Medical Center, where she focused on women with HIV.

Dr. Riley returned to Harvard Medical School, rising to become the Charles Montraville Green and Robert Montraville Green Associate Professor of Obstetrics, Gynecology and Reproductive Biology in 2016. Dr. Riley most recently served as Vice Chair of Obstetrics and Medical Director of Labor and Delivery at Massachusetts General Hospital.

For More Information

Dr. Laura E. Riley • lar9110@med.cornell.edu
the general assumption that minimally invasive surgery is safer than conventional open surgery, was published in the November 15, 2018 issue of The New England Journal of Medicine.

“We suspected that there might be a difference in survival between the two approaches, but the extent of the difference was surprising,” says Dr. Wright, who served as Co-Principal Investigator of the study. “Our findings suggest that minimally invasive surgery may not be appropriate for many patients with early-stage cervical cancer.”

The researchers analyzed data from the National Cancer Database of 2,461 women with early cervical cancer who underwent radical hysterectomy between 2010 and 2013. Half of the women had minimally invasive surgery. Within four years after surgery, 9.1 percent of the minimally invasive surgery group had died versus 5.3 percent in the open-surgery group, translating into a statistically significant 65 percent higher risk of death for the former when the difference over four years is considered.

The study did not investigate why minimally invasive hysterectomy might result in a higher mortality rate. One possible explanation is that uterine manipulators, which are used to retract and visualize the pelvic area during minimally invasive hysterectomy, may inadvertently spread microscopic tumor cells. Another possibility is that minimally invasive surgery is not inherently inferior to open surgery, but the surgeons who performed minimally invasive surgery on patients in this study may have been more experienced with open surgery.

“We recommended that patients talk to their doctor about the available surgical options,” says Dr. Wright. “Although minimally invasive surgery was associated with higher mortality, some patients may be willing to accept that risk, especially if they have very early cancers.”

For patients with early cervical cancer who already had minimally invasive hysterectomy, Dr. Wright says they don’t necessarily need more checkups or more screening. “The overall prognosis for women with early cervical cancer after minimally invasive or open hysterectomy is excellent,” he adds. “In either case, they should get periodic checkups, and if they experience any symptoms, such as pain or changes in vaginal bleeding, they should consult their gynecologic oncologist.”

Reference Article

For More Information
Dr. Jason D. Wright • jw2459@cumc.columbia.edu

Dr. Meera Garcia Leads Obstetrics and Gynecology at NewYork-Presbyterian Medical Group Hudson Valley

Meera S. Garcia, MD, an experienced clinician, teacher, and mentor, has been named Regional Director of Women’s Health Services and Division Chief of General Obstetrics and Gynecology at NewYork-Presbyterian Medical Group Hudson Valley. Dr. Garcia, Assistant Professor of Obstetrics and Gynecology at Columbia University Irving Medical Center, is also affiliated with NewYork-Presbyterian Hudson Valley Hospital. She practices general obstetrics and gynecology with clinical interests in pelvic floor disorders, minimally invasive surgery, and chronic recurrent vaginitis. She has particular expertise in procedures to treat pelvic floor disorders, including Botox infiltration and nerve blocks, and in vaginal, complex open, hysteroscopic, and laparoscopic surgeries. Dr. Garcia also cares for high-risk obstetric patients.

Dr. Garcia earned her medical degree from Duke University School of Medicine. She then completed her residency in obstetrics and gynecology at Emory University. During her time at Emory, Dr. Garcia won several awards for teaching and research.

Dr. Garcia joins NewYork-Presbyterian Medical Group Hudson Valley from Northside Hospital in Atlanta, where she served as Chairman of Gynecology and on the Obstetrics and Gynecology Executive Board.

For More Information
Dr. Meera S. Garcia • msg9014@nyp.org