

Robotic prostate surgery may mean big trade-off

October 13 2009, By CARLA K. JOHNSON , AP Medical Writer

(AP) -- A new study suggests less-invasive keyhole surgery for prostate cancer may mean a higher risk for lasting incontinence and impotence when compared with traditional surgery.

Laparoscopic, or keyhole, surgery is increasingly chosen by men having a cancerous prostate removed. And often it involves the highly marketed da Vinci robotics system. Da Vinci's popularity has been rising even though there's never been a rigorous head-to-head comparison between it and standard surgery.

"There's been a rapid adoption of this relatively new technique," said the study's lead author Dr. Jim Hu of Brigham and Women's Hospital in Boston. The results add to confusion around prostate cancer treatment. It's not clear that either surgery is superior to radiation alone or watchful waiting, which means simply monitoring the prostate for changes.

For the study, appearing in Wednesday's [Journal of the American Medical Association](#), researchers analyzed Medicare data for nearly 9,000 prostate cancer patients who had surgical treatment from 2003-07. Of those, 1,938 patients had minimally invasive surgery and 6,899 patients had standard surgery. The data did not indicate how many of the less invasive cases involved robotics.

The patients who had [keyhole surgery](#) left the hospital in two days, rather than three, on average. They also had lower rates of blood transfusions, breathing problems and internal scarring.

But they were more likely to report complications in the first 30 days after surgery involving genital and urinary function. About 5 percent of the minimally invasive surgery patients vs. about 2 percent of the standard surgery patients had these complications. And after 18 months, they had more incontinence and erectile dysfunction.

"The take-home message for men is they need to dig deeper than simply the message they might be getting from planted stories from device manufacturers or radio ads or billboards," Hu said.

In laparoscopic surgery, small incisions are made and the doctor uses a tiny camera and instruments for the operation. When robotics is used for this, the doctor sits at a console and manipulates similar instruments attached to robotic arms that work on the patient.

From 2001-06, use of the da Vinci system - the only robot available for this operation - rose from 1 percent to 40 percent of all radical prostatectomies. During that time, the stock price of da Vinci's maker, Sunnyvale, Calif.-based Intuitive Surgical Inc., increased 11-fold.

To compete for patients, more hospitals are buying robotic systems and advertising faster recovery times. More doctors are taking the two-day training to learn Intuitive's da Vinci Surgical System.

But many doctors perform too few robot-assisted surgeries to get good at it, Hu said, and that could explain the lasting problems that showed up in the study. Previous research has shown doctors who perform the most surgeries get the best results.

Hu had his own learning curve. He's now done more than 700 robotic prostate surgeries, but "it took several hundred cases before I thought I was doing really well in preserving erectile function and continence," he said.

The researchers found that the less-invasive surgery was more popular among more affluent, highly educated men. So it might be that those patients are more likely to seek help for urinary and sexual problems compared to men who had traditional surgery, said Dr. Ashutosh Tewari, director of the [Prostate Cancer](#) Institute at New York-Presbyterian Hospital/Weill Cornell Medical Center.

Tewari, who receives research funding from Intuitive Surgical and had no role in the study, faulted the research for lumping all minimally invasive surgeries together, both robotic and those using older laparoscopic techniques.

Ryan Rhodes, a spokesman for Intuitive Surgical, said there have been more than 800 previous studies on robot-assisted prostate surgery. "The overwhelming majority of these show superior results," both for cancer treatment and urinary continence and sexual function, Rhodes said in an e-mail.

Dr. Greg Zagaja of University of Chicago Medical Center, who does similar research but wasn't involved in the new study, said the Medicare billing codes don't necessarily represent the surgical outcomes. He noted there wasn't a difference in the rate of procedures for treating incontinence and sexual dysfunction between the two groups.

Zagaja said the best advice for men is to ask how many robot-assisted surgeries a doctor has done.

One patient, Jack Denney, 65, of Lancaster, Ohio, said he didn't ask how many surgeries the doctor had done, and he still doesn't know.

"I knew I wasn't the first," Denney said. The retired tool and dye maker is cancer-free, but has had lasting erectile problems since his robot-assisted surgery in May 2007.

His advice? "Expect erectile dysfunction, no matter what they tell you," Denney said. "I think they overrate their success."

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