

THE WALL STREET JOURNAL

DOW JONES | News Corp *****

MONDAY, JUNE 25, 2018 ~ VOL. CCLXXI NO. 147

WSJ.com

★★★★ \$4.00

Monday, June 25, 2018

THE WALL STREET JOURNAL.

JOURNAL REPORT | BIG ISSUES

Is Robotic Prostate Surgery Better Than Traditional Surgery?

Men with prostate cancer face difficult choices. Among them: If they decide to have their prostate removed, how should it be done?

The traditional open surgery, in which a surgeon operates through a single long skin incision, is starting to be replaced by robotically assisted laparoscopy, with a surgeon

operating a robotic system that performs the surgery through smaller incisions. (A third option, laparoscopy performed by a surgeon without the robotic system, is available but has been overtaken by robotic surgery in the U.S.)

Although the robot-assisted surgery has become far more common, debate continues

on whether the procedure improves outcomes enough to justify its higher cost.

Advocates of robotically assisted prostatectomy argue that the procedure brings a number of advantages. Among them: less blood loss, shorter stays in the hospital and faster recovery times.

However, it isn't clear that the robotically

assisted procedures provide an advantage when it comes to survival rates and urinary and erection problems. And it costs significantly more.

Below, two surgeons make the case. Dr. Tewari regularly performs robotic-assisted prostatectomies, and Dr. Catalana performs the open surgery.

YES

Studies Show That Recovery Is Faster, And Results Better

BY ASHUTOSH TEWARI



TO ME, the question of robotic vs. traditional prostate surgery has a clear winner. With robotic surgery, patients have a shorter hospital stay and recover more quickly. Doctors have a better chance of

not leaving behind parts of a malignant tumor. And this type of surgery is actually easier to master than the traditional open variety.

Precise work

Behind many of these advantages is precision. Robotic surgery uses smaller instruments, which allows for much more delicate and exact movements during procedures. That has a number of positive effects.

For one thing, shorter hospital stays. Robotic surgery allows us to make smaller incisions, and move the surgical instruments with virtually 360 degrees of freedom, versus the larger cuts made by traditional surgery. By not cutting deeply into a man's gut, healing will occur much faster. It also means less pain medication might be needed.

This also means that patients experience higher rates of erectile-function recovery and a faster return to urinary continence. During the operation, a surgeon is able to perform a delicate removal of the prostate from the top of the nerve hammock, preserving the nerves that support sexual function and urination.

Similarly, precision means surgeons are much less likely to leave parts of a malignant tumor in a patient's body.

Finally, robotic surgery has one advantage that might not be so obvious: It has a quicker

learning curve than traditional open procedures, because the robot is able to eliminate certain aspects of surgery, such as hands that vibrate or shake, that are otherwise tough to overcome.

What advantage?

Proponents of traditional surgery rest their case on a number of points. For one, they argue some studies that show advantages to robotic surgery aren't reliable because the methodology was flawed. But more recent studies support the conclusions of that research.

They also argue that some advantages attributed to robotic surgery are due to the skill of the surgeon. Yet surgeons report they like robotic surgery, and studies show better results.

Then there's the idea that open surgery offers advantages over robotic, including tactile feedback. Consider an analogy: Swiss watchmakers. When these experts start working in the dark, relying on tactile feedback and not magnifying glasses, then we'll believe that surgery should be done by touch and not direct visualization of anatomical structures.

Open-surgery proponents also cite studies that they say support their side. One, for instance, shows a massive survival rate in open-surgery patients. But it doesn't reflect the huge advances in diagnosis and performance for robot surgery since the study began.

Another study claims that robotic surgery offers relatively small benefits for the higher cost it brings. I disagree. Robotic surgery offers fewer blood transfusions, a shorter hospital stay and quicker recovery. These are hardly small benefits.

Of course, even in the most experienced hands (including mine), we are far from getting perfect outcomes in all patients. I remain dissatisfied with imperfect outcomes that can happen in a small proportion of patients, and try to do my job better. The robotic approach gives me better vision, much less bleeding and improved reconstruction ability. These are the key reasons I prefer robotic.

Dr. Tewari, system chairman of the department of Urology at Mount Sinai Health System, can be reached at reports@wsj.com.

NO

The Best Studies Still Show Traditional Is The Gold Standard

BY WILLIAM CATALANA



FOR MEN choosing prostate surgery, a key decision is whether it should be performed with robotic assistance or by the traditional open method. Largely because of aggressive marketing, most prostatectomies

are performed robotically.

But it isn't the best choice. There is no quality evidence that robotic procedures deliver better outcomes than open ones.

Poor analysis?

Simply put, robotic prostatectomy advocates rely on studies with poor methodologies.

One widely quoted study compared open procedures performed before a new screening technique allowed for earlier detection of cancer with robotic ones performed after wide adoption of the technique. There's no legitimate way to compare techniques from the two eras, especially considering that difficult cases for many years were usually performed open; tumor volume can't be accurately measured; and surgeon expertise must be considered.

Consider also: Robotic prostatectomy was initially used preferentially in patients with early-stage, favorable tumors. What's more, those procedures tended to be performed during the screening era. So, robotic procedures were compared with open-surgery patients with worse tumors and whose surgeries were performed earlier—meaning more time for tumors to recur, metastasize and lead to death.

Robotic-prostatectomy advocates cite studies reporting that robotic surgery has less blood loss, fewer complications and lower pe-

rioperative mortality. But these variables depend on the skill and experience of the surgeon, as do other supposed pluses for robotic surgery such as removing more of the tumor and steadying of hands. As for the shorter hospital stay for robotic surgery, studies by several institutions show the recovery time is about the same for both types of surgery.

Open prostatectomy also offers the advantages of tactile feedback; greater access to the surgical field; less need for electrocautery that burns tissues; and absence of concern about equipment failure or inadvertent tissue injury.

Few studies have reported meaningful data on recurrence, metastasis or prostate cancer-specific death rates with robotic prostatectomy. More objective analyses show many of the best outcomes are achieved by open prostatectomy. In outcomes most men care about—death, complications and mortality—the 2017 Ontario Health Technology Assessment concluded: "We did not find high-quality evidence that the robot-assisted approach improves cancer-related outcomes" or major functional ones, such as urinary and sexual function.

The best evidence

Or consider 20-year cancer-specific survival rates reported from the patients with clinically significant tumors operated upon, using open surgery, by Patrick Walsh of Johns Hopkins. Among men whose tumor was confined to the prostate with cancer-free surgical margins, the cancer-specific survival rate was nearly 100%. The highest level of evidence for open prostatectomy comes from randomized clinical trials showing that open surgery significantly reduces metastases and prostate-cancer deaths. They show tumor progression, metastases and cancer deaths are significantly lower in men treated with open surgery.

No such evidence exists for any other type of prostatectomy. The open technique remains the gold standard to which all other options should be compared.

Dr. Catalana is a professor of urology at Northwestern University's Feinberg School of Medicine. He can be reached at reports@wsj.com.