

# HEALTH watch

WHAT'S NEW IN MEDICINE AND HOW YOU CAN STAY WELL

## BACK TO THE GOOD LIFE after prostate surgery

*A new technology promises to  
make dreaded side effects less likely*

**F**or men with fast-growing prostate cancer, a cure has often come with a big price tag: incontinence or loss of sexual potency. But today, thanks to a surgical procedure two Bergen County-based surgeons have helped to pioneer, such men have a better chance to beat this cancer with their quality of life intact.

The operation is robotic prostatectomy, a minimally invasive procedure that also involves less blood loss, a shorter hospital stay and a quicker and less painful recovery than with traditional open prostate surgery. It's similar to open surgery in its cancer cure rate, but patients usually leave the hospital in 24 hours rather than the traditional three to five days.

Urologists Vincent J. Lanteri, M.D., and Michael P. Esposito, M.D., of the New Jersey Center for Prostate Cancer & Urology in Hackensack have done the procedure more than 900 times, more than anyone else in the tristate area. The team is one of three nationally that have trained other surgeons in the operation.

"With this procedure, what men ideally can achieve is what we call the trifecta—ending up cancer-free, continent and potent," says Dr. Esposito.

The surgery uses the da Vinci robotic surgical system. This technology is not a substitute for the surgeon, but a tool that extends his or her reach—and smooths out the slight tremor all human hands have. During the operation, one surgeon sits at a console a few feet from the patient, watching a moving three-dimensional image of the inside of the patient and guiding the movement of robotic arms with a joystick and foot controls. The other surgeon, meanwhile, stands over the patient, suctioning blood and urine. Both doctors participate "until the final Band-Aid is on the patient," says Dr. Lanteri.

Approved in 2000, the robot followed on the heels of laparoscopic surgery, which shortened recovery times dramatically by substituting small incisions

### See your doctor if you have these symptoms

Prostate cancer is far from the only possible cause of these signs, but they do bear checking out:

- difficulty starting to urinate
- less force to the stream of urine
- dribbling after you finish urinating
- frequent urination
- blood or pus in the urine
- pain or burning feeling while urinating
- pain with ejaculation
- hip or back pain that does not go away

SOURCE: AMERICAN ACADEMY OF FAMILY PHYSICIANS



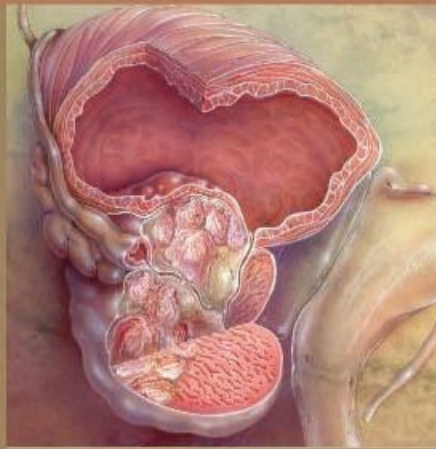
## PROSTATE CANCER: the threat—and how to guard against it

The prostate is a walnut-sized organ at the base of a man's bladder that secretes a fluid that helps to form semen. Cancer of the prostate kills 30,000 Americans each year; after lung cancer, it's the biggest cause of cancer deaths among men. But it's diagnosed in some 230,000 men annually, and in most cases it's not lethal; many more men die *with* this disease than *from* it.

To visualize the threat, think of a high school gym class of 33 guys. The averages say one of them will die from prostate cancer, while between five and six will be diagnosed with the disease at some point.

Prostate cancer becomes more common with age. Authorities differ on when men should start regular screening, but most agree that by age 50 (40 if you're African-American or have family members who've had the disease) these two tests should be performed each year:

- **DIGITAL RECTAL EXAM.** Your doctor inserts a lubricated gloved finger into your rectum to feel the back wall of the prostate for nodules or hard spots.
- **PSA BLOOD TEST.** A sample of your blood is analyzed for prostate-specific antigen (PSA), a protein produced by prostate tissue. Your PSA count is measured in nanograms per milliliter (ng/mL), and it tends to increase with age whether you have cancer or not. According to the Mayo Clinic, a normal PSA range for a man in his 40s is from 0 to 2.5 ng/mL, and the upper



A cutaway view of the prostate gland

limit of normal rises by 1 ng/mL with each subsequent decade through the 70s. But it's important to discuss your result with your doctor. The PSA test is imperfect: Other conditions such as an enlarged prostate can cause elevated PSA counts, and some men with prostate cancer have normal PSA counts. You should refrain from sexual activity for 24 hours before your test, and tell your doctor about any medications you're taking—especially finasteride (marketed for hair loss as Propecia and for enlarged prostate as Proscar), which can distort the result.

Diagnosis of prostate cancer is usually made following a biopsy of prostate tissue, which is extracted with a small needle inserted through the perineum, the area between the anus and the scrotum. Analysis of the tissue yields what is called a Gleason score (see below), a measure of how fast-growing your cancer is. Based on this and other information, a treatment course will be recommended—but it will be up to you to decide.

Robotic prostatectomy may be an option if you choose an operation to remove the prostate gland and the nearby seminal vesicles. Other possibilities include open surgery, external radiation, radiation with implanted seeds (brachytherapy) and "watchful waiting"—no treatment now, but careful monitoring to see if the cancer cells change.

for the 8- to 10-inch cuts made in traditional prostate surgery and using a remotely operated camera. But it was technically demanding. The robot gives surgeons more flexibility, as it can mimic the twisting action of the human wrist. But the procedure still takes practice.

"It's like flying an airplane," says Dr. Lanteri. "The more experience you have, the better."

In most cases, the minimal blood loss and three-dimensional visual clarity offered by the new machine allow the surgeons to spare both the urethral sphincter that controls urination and two "neurovascular bundles" that affect erectile capability.

"We don't use any electrical energy around the nerves that control erection," says Dr. Lanteri.

"I only wore a diaper for one day, and my erectile function returned about two weeks after surgery," says Joseph Martini, 67, a telecommunications consultant who had the procedure in 2004. A week after his operation, he attended a Giants football game.

For others, returning to normal takes a bit more time. But an estimated 90 percent of patients no longer require protective urinary pads after two months, and 99 percent don't need them after a year, the doctors report. Among men who had strong

potency beforehand, full sexual function returns in three months for about 35 percent, in six months for 60 percent and in 12 months for 85 percent.

The two New Jersey surgeons "wrote the book" on this surgery—literally. Co-authors of a textbook called *Robotic Urologic Surgery*, they note that the system can also be used for a number of other procedures, including the repair of kidneys with blockages. "In urology," says Dr. Esposito, "this is the future." ■

### What Gleason scores tell about prostate cancer cells

If you've been diagnosed with prostate cancer, you'll probably get a Gleason score, a measure of how aggressively your cancer is likely to grow and spread. Named for Donald Gleason, M.D., the pathologist who developed it in 1966, the Gleason score ranges from 2 to 10. The lower your number, the better.

To obtain the score, a tissue biopsy taken from the prostate is examined under a microscope. Each of the two most prominent patterns of cancer cells is graded from 1 to 5, 1 for small, uniform and highly differentiated cancer cells that are almost like normal cells, and 5 for very irregular cell masses. Gleason scoring depends on the pathologist's ability and experience, so it's a good idea to get a second opinion.

