

# Beating prostate cancer —safely

TODAY, BOTH SURGERY AND RADIATION CAN OFTEN AVOID SERIOUS SIDE EFFECTS. BUT MAKE SURE YOU GET THE BEST CARE

**TRADITIONALLY, PROSTATE CANCER** treatments—like the disease itself—have caused two serious problems for many men: impotence and incontinence. Now, however, therapies are more often able to spare patients these dreaded side effects. And better screening enables many cancers to be spotted earlier, when treatment is more effective.

“Twenty years ago we diagnosed a lot of advanced prostate cancer,” says Arnold M. Grebler, M.D., chairman of urology at Monmouth Medical Center. “Today



Arnold M. Grebler, M.D.

we’re identifying the disease much earlier, when it’s organ-confined, so patients have better treatment alternatives, better outcomes, greater longevity and a better quality of life.”

Which therapy is right for you? There are no hard-and-fast rules, but recommendations will take into account your age and general health and the cancer’s stage (degree of advance) and grade (speed of growth). “If you’re relatively young—say, 50—and have organ-confined disease, it may be appropriate to have surgery to remove the prostate,” says Dr. Grebler. But if you’re 70 or older or don’t want major surgery, you may be more likely to seek radiation treatment. For those over 70 who have other serious medical conditions and a slow-growing cancer, watchful waiting may be the right approach.

It also makes a difference *where* you receive treatment. “At Monmouth, we’re a cancer referral center, and



we offer almost every form of therapy,” says Dr. Grebler. In treating prostate cancer, Monmouth doctors go the extra mile (in ways that other places sometimes don’t) to preserve a man’s continence and sexual potency.

Here are two key therapies—and some treatment advantages you’ll find only at a top hospital like Monmouth Medical Center:

## 1 **Surgery: ROBOTIC PROSTATECTOMY**

Today, the prostate gland is removed in a minimally invasive procedure that uses a tiny incision. This approach makes hospital stays shorter and allows a quicker, less painful recovery than the open surgeries of

**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 is expected to claim the lives of 28,660 American men this year; after lung cancer, it's the biggest cause of cancer deaths among men. But 186,320 cases will be diagnosed this year, and in most cases prostate cancer isn't lethal; many more men die with this disease than from it.

Prostate cancer becomes more common with age. Authorities 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. A normal PSA range for a man in his 40s is from 0 to 2.5 ng/mL, and the upper 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. Besides your PSA score itself, two other factors are important: (1) how fast your score is rising—a rapid recent increase in the score may be of concern even if the score itself isn't too high; and (2) the percentage of "free" PSA—PSA that is not bound to what is called a carrier protein. If this percentage is 25 or higher, benign prostatic hyperplasia, or simple enlarged prostate, is usually the culprit, while if it's 10 or less, a malignancy may be suspected.

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



A cutaway view of the prostate gland.

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 opposite page). Based on this and other information, a treatment course will be recommended—but it will be up to you to decide.

the past. The operation is done with a robot that's remotely controlled by the surgeon and smooths out the tiny tremor that's present in even the coolest surgeon's hand.



Vincent J. Lanteri, M.D.

If you choose this operation, one of your first questions for the surgeon should be, "How many have you done?" For urologists Vincent J. Lanteri, M.D., Michael P. Esposito, M.D., Mutahar Ahmed, M.D., and Gregory Lovallo, M.D., of New Jersey Center for Prostate Cancer and Urology, who offer the surgery at Monmouth, the

answer is "more than 1,400." They literally wrote the book on this relatively new operation—a textbook called *Urologic Robotic Surgery*.

"Put yourself in the hands of someone who has tremendous experience," says Dr. Esposito. "It can make a difference in how quickly you get normal urination back and how good your sexual function is."

**THE 'EXTRA MILE':** The Monmouth surgeons take meticulous care not to damage the sphincter muscle that controls urination. In a process called anterior urethropexy, Dr. Esposito explains, they suture the urethral tube upward, positioning it to aid urinary control. They

use a noncautery athermal approach that spares the nerves that control erections.

"A nerve has blood vessels next to it, and when it's separated from the prostate these vessels often bleed," adds Dr. Lanteri. "When surgeons see bleeding from a vessel, they have a tendency to cauterize it—burn it. We don't—and that's better for preserving erectile capability. But not all surgeons can do this technique."

In their practice, of the men who've gone into the surgery with good preoperative potency, 70.2 percent have been able to achieve erections in three months, and 93.2 percent by the one-year mark.

**2 Radiation: BRACHYTHERAPY and TOMOTHERAPY**

Brachytherapy—from the Greek *brachy* meaning "short"—is radiation delivery in which the source is placed inside or beside the tissue to be treated. Monmouth offers two kinds: In I-125 seed brachytherapy, named for the iodine isotope it uses, small radioactive seeds the size of a grain of rice are permanently implanted in the prostate. In high-dose radiation (HDR) brachytherapy, doctors insert a canula—a small tube—into the prostate for about 33 hours. Brachytherapy is often combined with traditional external-beam radiation and sometimes with hormone treatments as well.

**THE 'EXTRA MILE':** "We use what's called 'after-loading,' as opposed to the 'preloading' favored at many institutions," says Dr. Grebler. "That means that right while the patient is lying there, we employ ultrasoundography and stereotactic [three-dimensional pinpointing] technology to create a hologram of the prostate and quantify the cancer present. Then we calculate precisely the amount of radiation needed—right then, not on an earlier occasion. So it stands to reason that we're treating the disease more effectively, with fewer side effects and easier follow-up."

Two other advantages: The hospital allows a much lower maximum radiation dosage to the urethra than do most facilities, suggesting better protection for urination. And it's the only hospital in central or southern New Jersey to offer HDR.

"Most places combine seed therapy with traditional external-beam radiation," says Mitchell Weiss,

**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. Good Gleason scoring depends on the pathologist's ability and experience.



M.D., Monmouth's chairman of radiation oncology. "We can combine external-beam treatments with HDR instead, which I feel lets us control delivery of the dose more precisely. We reserve seeds mostly for low-risk patients and use HDR for intermediate- and high-risk individuals—those with a Gleason score of 7 or higher." (See "What Gleason Scores Tell About Prostate Cancer Cells," above.)



Mitchell Weiss, M.D.

When it comes to delivering radiation beams externally, Monmouth has another advantage. It offers TomoTherapy, a nearly 360-degree computed tomography (CT) scanner system that takes images of the anatomy and shoots tiny beamlets of radiation in varying directions and intensities to conform precisely to the tumor's shape and location, sparing healthy tissue. (See "Cutting' Out Cancer Without a Knife" on page 36.)

Says Dr. Weiss: "With our radiation treatments, the risk of urinary incontinence has become very small—it's about 1 percent. Some 30 percent of men do experience erectile difficulties after treatment, but about 70 percent of these can be helped with medications." ■

**Prostate cancer accounts for 25 percent of all male cancers but only 10 percent of cancer deaths in men.**

To find out more about prostate cancer treatment at Monmouth Medical Center, please call 1-888-724-7123.