



# Prostate cancer is more treatable than ever if caught early

**BY ASH TEWARI, MD**

Options for treating prostate cancer have improved dramatically in recent years. We still have to battle the disease, but most of the time, we win.

Over the course of a lifetime, about one in seven men will develop prostate cancer, making it the single most common cancer specific to men. Each year, more than 160,000 new cases are diagnosed. While the majority of these are treatable or not life-threatening, more aggressive forms of prostate cancer can be fatal. About 26,000 Americans died of prostate cancer last year.

The prostate is a male gland that produces chemicals essential to sexual function and to protecting against infection. The gland is fairly small, ranging in size from a walnut to a golf ball, and located at the mouth of the bladder.

I like to use a metaphor to describe this placement: If you imagine the male body as a three-story house, then the brain is on the third floor, the heart is the second floor, the stomach is the ground floor, and the prostate is in the basement, close to the plumbing (the bladder) and the electrical wiring (the nerves that control sexual function).

We don't know exactly what causes prostate cancer. However, this is a disease associated with aging, with most cases appearing in men over the age of 65. It is extremely rare for men under 40 to be affected.

The symptoms of prostate cancer are non-specific, late-occurring, and often a sign of aggressive cancer, so we try to diagnose cases before they are symptomatic. The red flags to look out for are symptoms like blood in the urine or pain with urination. Most often, these symptoms are

caused by something other than cancer. Nonetheless, you see should your doctor about any urinary symptoms.

All of which raises the question, who should be screened for prostate cancer? There is no universal recommendation, but certain groups are at particularly high risk.

Prostate cancer screening is recommended for men 45 and older if they have a family history of prostate cancer, are African-American, or have genetic mutations such as a BRCA gene mutation.

Any man between 55 and 70 years old is a potential candidate for prostate screening, so check with your doctor if you are in that age range.

Prostate cancer screening consists of a blood test called the prostate-specific antigen (PSA) test, which measures a particular protein that is produced by the prostate. Whether a given number is suspiciously high depends on the patient's age, the prostate's volume, and sometimes on racial differences.

If the PSA test results are a cause for concern, then the next step is a biopsy or imaging. Then, if we see something suspicious, we can do something about it.

There are different kinds of prostate cancer, and determining which kind a patient has is one of the challenges of treating this disease.

We divide prostate cancer into three main categories, from least aggressive to most aggressive, using a system called the Gleason Score, based on how the cells appear under a microscope.

The least aggressive cancers, which we call indolent, have a score of Gleason 6. The next group, Gleason 7, are cancers that can be managed easily. More aggressive cancers have the score of Gleason 8, 9, or 10. These are more difficult to treat, and we may need to try multiple treatments before finding the right one.

We have a wide array of options for treating prostate cancer. For patients with indolent cancer, no direct intervention may be necessary. Instead, the best option might be what we call "active surveillance": a schedule of regular screening exams (blood tests, digital rectal exams, and occasional biopsies), paired with simple lifestyle modifications, like getting plenty of exercise and eating right.

For cancers that pose an intermediate risk, many factors play into the treatment strategy. For instance, younger patients who have a longer life expectancy will often opt for more aggressive treatments, like surgery. Patients' preferences and sexual activity are also part of this conversation.

Surgery, radiation, chemotherapy, and hormone therapy are all options for patients with more aggressive cancers. Some patients will need a combination of these treatments, while others might need only one.

For cancers that have not spread beyond the prostate, surgery to remove the prostate may suffice. This surgery can now be performed minimally invasively, through small "keyhole" incisions.

A typical patient might come in for surgery in the morning, get up out of the hospital bed before the end of the day, and leave the next morning, after showing he can walk a few laps in the hospital corridors. Usually, the patient comes back in about nine days to have a urinary catheter removed, and then is back to work in two weeks. Our options for delivering radiation have also improved greatly. Broadly speaking, we can deliver radiation from the outside in or the inside out. In the first case, beam radiation is targeted at the prostate from outside the body. We have many types of beam, including proton beams, conventional beams, and the CyberKnife system, in which a computer-controlled robot delivers targeted radiation.

In the second case, we actually place the source of radiation inside the prostate by implanting radioactive seeds, a treatment called brachytherapy. For more information on the many treatments available, check out the Prostate Cancer Foundation ([pcf.org](http://pcf.org)) or American Cancer Society ([cancer.org](http://cancer.org)).

There are some basic steps we can all take to decrease our risk of prostate cancer. Anything you can do to reduce inflammation levels will help. That includes cutting down on red meat, animal fats, and sugar, as well as increasing your intake of blueberries and mushrooms.

In general, being less anxious and exercising more can keep inflammation in check.

Receiving a diagnosis of prostate cancer can be overwhelming and frightening. Thankfully, we have many effective treatment options, so there is hope for a really good outcome.