

Weighing the Evidence

The Benefits of Prostate Biopsies Far Outweigh the Risks



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According to Dr. Patrick Walsh in his highly recommended book *The Guide to Surviving Prostate Cancer*, this disease has the highest age-specific probability diagnosis of any cancer.

That is, for men 39 or younger, the probability of getting prostate cancer is just 1 in 10,000. Yet that probability skyrockets for men older than 60, to 1 in 7 for the 60- to 79-year-old age group (the average age of diagnosis is 67). Men in this age group are three times more likely to get prostate cancer than women are to get breast cancer.

After reaching the traditional retirement age, a man potentially still has a long life ahead, yet the high precedence of prostate cancer in this age group is diminishing the golden years for many.

But prostate cancer is very treatable. In fact, if discovered early and managed correctly, the relative 10-year survival rate is 98%—and getting better.

You may know about the controversy surrounding the US Preventative Services Task Force (US PSTF) panel recommendation that men should not seek prostate-specific antigen (PSA) screening for prostate cancer. The panel cited pain and risk of infection associated with biopsies as two reasons behind its decision.

However, thanks to advance anesthesia and prophylactic (preventative) antibiotics, we believe the negatives of biopsy simply do not out-weigh the positives.

In the last issue of *Our Health* (available at ampofny.com), AMP Urology offered its position that screening and diagnosis must begin with PSA testing and/or a digital rectal examination (DRE) but that the decision to proceed to biopsy must take into account other factors, such as age and family and medical history.

What is a Prostate Biopsy?

Dr. Walsh imagines the prostate gland as a strawberry, and the cancer that can grow within it as seeds. That's an apt image: tiny spots of prostate cancer really can spread throughout the strawberry-sized gland. It's the surgeon's job—using a spring-loaded biopsy gun with an extremely thin, hollow needle—to take out about 12 “cores” of tissue so that, if they are present, some of these “cancer seeds” can be captured.

A biopsy is a short, out-patient procedure, usually taking 15 to 20 minutes. The tissue cores are sent to the lab to be looked at under a microscope. Your doctor receives the results about a week later. Aside from diagnosing prostate cancer, a biopsy helps with assessing (staging) a tumor, judging the size of the prostate to determine appropriate therapies, and monitoring response to therapy.

For some patients, more than one biopsy might be required. This will be true if a doctor suspects a false negative, if there is a suspicion that cancer has returned, or if he or she recommends “active surveillance,” a management strategy that delays treatment until necessary, based on how the disease is progressing.

Until the 1990s, core needle biopsies were performed “blind,” and back then they were more risky and less reliable. One great leap forward was the use of transrectal ultrasound imaging during a biopsy to guide doctors. But no matter how advanced the biopsy procedure becomes, it's never going to be a fun experience. It needn't be painful, though. Without anesthesia, a prostate biopsy would hurt a lot because that part of the body is full of nerves.

Different types of anesthesia and sedation can be used during a biopsy. At AMP Urology, we prefer “prostate nerve block anesthesia,” in which an anesthetic is injected to reach the “pelvic plexus” via a spinal needle. Anesthesia, along with

smaller biopsy needles, have greatly reduced pain associated with a biopsy.

Lowering Infection Risk

Other possible complications of biopsy include urinary or rectal bleeding, urinary retention, blood in the semen, and infection. Critics of biopsies often cite the infection risk from fecal bacteria being introduced into the prostate as the biopsy needle travels through the rectum. This risk is real, but new procedures are making it vanishingly small.

An effective method of infection control is to have the patient take antibiotics a few days before and a couple of days after a biopsy. One study found the use of antibiotics has reduced infection risk to 2% or 3%. A 2012 European study found that infections requiring hospitalization were seen in just 0.8% of biopsies using prophylaxis.

Because the widespread use of antibiotics in humans and animals has given rise to drug-resistant bacteria, AMP urologists use a two-drug combination of fluoroquinolones, aminopenicillins, cephalosporins, and/or aminoglycosides. Furthermore, we consult the “community antibiogram,” a list of our region's prevalent disease-causing bacteria and their drug susceptibility, as well as your medical history, in case of allergies or signs of drug resistance.

AMP urologists take other measures to assure safe and accurate biopsies. We give patients enemas two hours before the procedure to reduce infection risk, and to reduce the risk of bleeding and infection, we ask patients to stop taking medication that thins the blood, especially heart medication (and we consult your cardiologist to check that this is OK).

Even though the threat of infection is very small, it must be taken seriously. If you develop signs of an infection (fever or chills) after a procedure, immediately see a doctor.