Understanding Your Pathology Report: Atypical Prostate

(Including ASAP, Atypical Findings, and Suspicious for Cancer)

When your prostate was biopsied, the samples taken were studied under the microscope by a specialized doctor with many years of training called a pathologist. The pathologist sends your doctor a report that gives a diagnosis for each sample taken. Information in this report will be used to help manage your care. The questions and answers that follow are meant to help you understand medical language you might find in the pathology report from your prostate biopsy.

What does it mean if my biopsy report mentions the word core?

The most common type of prostate biopsy is a core needle biopsy. For this procedure, the doctor inserts a thin, hollow needle into the prostate gland. When the needle is pulled out it removes a small cylinder of prostate tissue called a core. This is often repeated several times to sample different areas of the prostate.

Your pathology report will list each core separately by a number (or letter) assigned to it by the pathologist, with each core (biopsy sample) having its own diagnosis. If cancer or some other problem is found, it is often not in every core, so you need to look at the diagnoses for all of the cores to know what's going on with you.

What does it mean if my report says the findings are atypical, atypical small acinar proliferation (ASAP), suspicious for cancer, glandular atypia, or atypical glandular proliferation?

All these terms mean that the pathologist saw something under the microscope that is
worrisome for cancer, but he or she is not absolutely sure that cancer is present.

**Why can’t the pathologist be sure if cancer is present on my biopsy sample?**

There are a lot of things that can be seen under the microscope that are not cancer yet can look like cancer. Because of this, the pathologist has to be very cautious when diagnosing prostate cancer, especially on a small biopsy sample.

**What does a finding that is atypical or suspicious for cancer mean in terms of my chance of having prostate cancer on a repeat prostate biopsy?**

Overall, if 100 men with a finding that is atypical or suspicious for cancer on their original biopsy reports had a second biopsy done within 6 months, about 40 of them would have cancer diagnosed on the second biopsy.

**Is the chance of my having prostate cancer on repeat biopsy affected by my PSA blood test?**

Your prostate-specific antigen (PSA) blood test level does not affect your risk of cancer on repeat biopsy.

**Do I need a repeat biopsy?**

For men with a biopsy finding that is atypical or suspicious for cancer, follow up is warranted with blood or urine tests, imaging tests and, in some cases, repeat biopsy. The reason that repeat biopsy is not always done is that most of the cancers found following an “atypical” biopsy are not life threatening. Ask your treating doctor if and when you should have a repeat biopsy.

**What does it mean if my biopsy report also says high-grade prostatic intraepithelial neoplasia (PIN)?**

High-grade prostatic intraepithelial neoplasia (high-grade PIN) is considered a pre-cancer of the prostate, because it can turn into prostate cancer over time. Still, the risk of prostate cancer linked to high-grade PIN is lower than the risk of prostate cancer seen with findings atypical or suspicious for cancer. This means that atypical findings in your sample have a greater impact on your cancer risk and future care than a finding of high-grade PIN.

**What does it mean if my biopsy report also says acute inflammation (acute
prostatitis) or chronic inflammation (chronic prostatitis)?

Inflammation of the prostate is called prostatitis. Most cases of prostatitis reported on a biopsy are not caused by infection and do not need to be treated. In some cases, inflammation may increase your PSA level, but it is not linked to prostate cancer.

What does it mean if my biopsy report also mentions atrophy, adenosis, or atypical adenomatous hyperplasia?

All of these are terms for things that the pathologist might see under the microscope that are benign (not cancer), but sometimes can look like cancer under the microscope.

Atrophy is a term used to describe a shrinkage of prostate tissue (when it is seen under the microscope). When it affects the entire prostate gland it is called diffuse atrophy. This is most often caused by hormones or radiation therapy to the prostate. When atrophy only affects certain areas of the prostate, it is called focal atrophy. Focal atrophy can sometimes look like prostate cancer under the microscope.

Atypical adenomatous hyperplasia (which is sometimes called adenosis) is another benign condition that can sometimes be seen on a prostate biopsy.

What does it mean if my biopsy report mentions a seminal vesicle?

The seminal vesicles are glands that lie just behind the prostate. Sometimes part of a seminal vesicle is sampled during a biopsy. This is not a cause for concern.

What does it mean if my biopsy report mentions special tests such as high molecular weight cytokeratin (HMWCK), ck903, ck5/6, p63, p40, AMACR (racemase), 34BE12, PIN4 cocktail, or ERG?

These are special tests that the pathologist uses to help decide if your biopsy shows prostate cancer. Not all patients need these tests. Whether or not your report mentions these tests has no effect on the accuracy of your diagnosis. Unfortunately, even with these tests, a biopsy diagnosis of atypia means that it isn’t clear if cancer is present or absent.

Hyperlinks

This series of Frequently Asked Questions (FAQs) was developed by the Association of Directors of Anatomic and Surgical Pathology to help patients and their families better understand what their pathology report means. These FAQs have been endorsed by the College of American Pathologists (CAP) and reviewed by the American Cancer Society.

Learn more about the FAQ Initiative (www.cancer.org/treatment/understanding-your-diagnosis/tests/understanding-your-pathology-report/faq-initiative-understanding-your-pathology-report.html)⁴

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