



The Role of Testing in Advanced Prostate Cancer

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Andrew Schorr:

Okay. Dr. Catalona, let's talk about this. You've been involved over the years with the PSA tests. And now, you have genetic tests that are coming online. You've been involved in a lot of the research there. How does a man and their doctor understand best today what they're dealing with?

Dr. Catalona:

So I personally believe that every man should have a baseline PSA test in their 40s. If their PSA is significantly higher than the median level for patients in that age group, we know that they are at a high risk for developing prostate cancer and, actually, at a significantly higher risk for having metastatic prostate cancer or death from prostate cancer.

So I think that that's one very important thing in determining risk assessment. And then once they're diagnosed with prostate cancer, there are a number of clinical factors that give you a good clue as to how aggressive it is. 1) Is how high the PSA was at diagnosis? 2) Is how many of the biopsy samples are involved with cancer and the extent to which they're involved with cancer? And the third is what they call the Gleason grade, which is the way the cancer looks under the microscope. And you're able to tell the more rapidly threatening cancers from the more slowly growing cancers by the Gleason grade. And so those are very valuable clinical factors. And now, we have genetic tests.

And there are several of them out there that are commercially available. They're expensive. They cost thousands of dollars. Some of them focus on one type of molecular pathway that could be driving the prostate cancer. Others may focus on four different molecular pathways that could be driving the cancer. So, some of these tests may be more accurate for some tumors but less accurate for other tumors. And at the present time, we don't have head-to-head comparisons to say which tests would be available for every patient. But it's probably true that not all of them would be equally good for all patients.

Andrew Schorr:

Okay. Now, Dr. Szmulewitz, I'm a leukemia survivor. And there, they've even seen the genes related to a cancer change over time. So would a man, as these genetic tests come online, need to have tests, if the tests are accurate, more than once?

Dr. Szmulewitz:

So that's a great question. And the honest answer is that we don't know. We do know that, just as in leukemia, in prostate cancer, mutations or drivers of the disease can evolve over time and under the pressure of different therapies that we give. So we give a therapy. The cancer adapts. It makes new mutations. So we do know that different mutations can arise as the cancer progresses. But we don't know yet that we should biopsy at multiple time points. We don't know when. We don't know exactly how.

But I'll tell you, in my practice, what I tend to do is, when I perceive that the biology is changing, in other words if it's spreading to different organs that it was before, if it's making different markers than it was before in the blood, then I will, often, get a repeat biopsy assessment and send it to either our lab that has a genomic profiling kit or to one of the outside labs in order to see if there are new mutations that we may be able to target.

Andrew Schorr:

Okay. Now, this is a changing area of medicine. What do you think? Do you agree with that?

Dr. Catalona:

I agree. And I think Dr. Szmulewitz is being conservative. But I think almost certainly, as tumors progress, they develop new mutations. And so the genetic marker that's relevant at that time may be quite different than the genetic marker that they had at the time they were initially diagnosed. And I would speculate that, in the future, as a patient progresses from responding to one form of therapy to now not responding, probably a biopsy should be done. And it should be determined what now is driving this cancer. And that should be involved in selecting the next therapy that would be best for the patient.

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