Funding for Yale Cancer Answers is provided by Smilow Cancer Hospital. Welcome to Yale Cancer Answers with Doctor Anees Chagpar. Yale Cancer Answers features the latest information on cancer care by welcoming oncologists and specialists who are on the forefront of the battle to fight cancer. This week it’s a conversation about prostate cancer with Doctor Preston Sprenkle.

Dr. Sprenkle is an associate professor of urology at the Yale School of Medicine, where Doctor Chagpar is a professor of surgical oncology. Preston, maybe we can start off by you telling us a little bit more about yourself and what it is you do.

I’m a urologic oncologist by training. So that means that I have done a urologic surgery residency and then an oncology fellowship. So I primarily take care of men and women with urologic cancers. My practice now primarily deals with men with prostate cancer and also testicular cancer. Let’s talk a little bit more about prostate cancer. It seems to be a pretty ubiquitous cancer.

Many, many men seem to get it,
0:01:12.92 –> 0:01:15.578 but it seems that it’s
0:01:15.578 –> 0:01:17.35 a little bit heterogeneous
0:01:17.438 –> 0:01:19.82 in terms of how it’s managed.
0:01:19.82 –> 0:01:21.932 So can you give us kind of the
0:01:21.932 –> 0:01:24.968 lay of the land in terms of the
0:01:24.968 –> 0:01:26.592 epidemiology of prostate cancer?
0:01:26.6 –> 0:01:27.428 Who gets it?
0:01:27.428 –> 0:01:30.12 When do they get it and how bad is it?
0:01:30.87 –> 0:01:33.145 Those are a great observations.
0:01:33.15 –> 0:01:36.125 Prostate cancer is very common,
0:01:36.13 –> 0:01:39.304 it’s probably the most common
0:01:39.304 –> 0:01:41.87 solid organ malignancy in men.
0:01:41.87 –> 0:01:44.14 It will ultimately affect between
0:01:44.14 –> 0:01:47.106 one and seven and one in nine
0:01:47.106 –> 0:01:52.214 men throughout their life.
0:01:49.174 –> 0:01:52.21 It is however typically in older men.
0:01:52.21 –> 0:01:55.65 So over the age of 50 is when we really
0:01:55.744 –> 0:01:58.789 feel strongly about screening
0:01:58.789 –> 0:02:01.834 and evaluating for prostate cancer.
0:02:01.84 –> 0:02:04.185 Fortunately, most of the prostate
0:02:04.185 –> 0:02:07.73 cancers that we find do not require
0:02:07.73 –> 0:02:11.084 treatment though or at least require
0:02:11.084 –> 0:02:13.605 immediate treatment and it tends to
0:02:13.605 –> 0:02:16.531 be for most of the cases a very slow
0:02:16.531 –> 0:02:18.116 growing and slow progressing disease.
0:02:18.12 –> 0:02:20.544 So one that we can manage more as
0:02:20.544 –> 0:02:23.033 a chronic disease than necessarily
0:02:23.033 –> 0:02:25.449 requiring really intensive therapy.
0:02:25.45 –> 0:02:28.082 There are some patients and men that do
0:02:28.082 –> 0:02:30.524 require or we would recommend treatment
0:02:30.524 –> 0:02:33.092 for because their cancer could cause
them a problem in the next 15 or 20 years. But really prostate cancer, exceptionally rarely would cause problems for a man within 10 years of diagnosis unless it’s a very high or very late stage cancer. So Preston, some of our listeners might be listening to that thinking, well then what’s the purpose of screening if most men are going to do just fine with this, and for most people it’s not going to really cause them any problems for at least another 10 years. Why should we be getting screened at the age of 50? That’s a great question. So the reason that we screen is because our screening test, which is typically a PSA blood test, is a blood test that allows us to screen for prostate cancer. Just because the majority of men or the vast majority of men will not have a problem from their prostate cancer, we can identify those who will and we can treat them and interventions for prostate cancer can and do save lives. So we have studies that have shown that screening does improve the detection of prostate cancer and does improve the survival of men.
0:03:46.85 → 0:03:49.18 in a population who were screened.
0:03:49.12 → 0:03:50.62 So we do firmly believe that
0:03:50.62 → 0:03:51.62 we should do that.
0:03:51.62 → 0:03:54.91 It’s an easy intervention to be
0:03:54.91 → 0:03:59.96 screened and it definitely does save lives.
0:04:01.86 → 0:04:04.43 Are there certain populations,
0:04:04.43 → 0:04:08.29 either in a genetically or by
0:04:08.29 → 0:04:11.72 race category or other factors,
0:04:11.72 → 0:04:14.4 that might predispose a particular
0:04:14.4 → 0:04:17.08 gentleman for getting worse prostate
0:04:17.08 → 0:04:19.3 cancer than others?
0:04:19.3 → 0:04:21.63 This is an area that we are
0:04:21.63 → 0:04:23.44 continuing to learn more about,
0:04:23.44 → 0:04:27.64 but in general, men of black or African
0:04:27.64 → 0:04:30.99 heritage do seem to have a higher
0:04:30.99 → 0:04:35.46 rate of developing prostate cancer and higher
0:04:35.46 → 0:04:38.56 risk and higher grade prostate cancer.
0:04:38.56 → 0:04:38.56 So that is a population that we
0:04:38.56 → 0:04:41.05 recommend screening for men with certain
0:04:41.05 → 0:04:43.75 genomic and genetic mutations so that
0:04:43.75 → 0:04:46.88 the breast cancer or BR CA mutation
0:04:46.88 → 0:04:46.88 family is definitely one of those.
0:04:49.4 → 0:04:52.116 So in men who have multiple first
0:04:52.116 → 0:04:54.68 degree relatives or even a first
0:04:54.68 → 0:04:56.691 degree relative with prostate cancer
0:04:56.691 → 0:04:59.78 or they have women with breast cancer,
0:04:59.78 → 0:05:01.12 even some with pancreatic cancer.
0:05:01.12 → 0:05:04.738 So there are familial and genetic
0:05:04.738 → 0:05:07.897 risks that do increase and demands the
0:05:07.897 → 0:05:10.598 possibility of developing a prostate cancer.
0:05:10.598 → 0:05:13.472 And do men who have such
a genetic predisposition,
let’s say you have a sister who has a BRCA mutation. We’ll get into whether in fact you should get tested as a man if a woman in your family has a genetic mutation for BRCA. So that’s the first question, should you get genetic testing? And 2nd, regardless of whether you get tested or not, if you’re from that family with a genetic mutation, granted it increases your risk of prostate cancer, but is the prostate cancer that you eventually get if you get a prostate cancer, is that prognostically worse? Is it a more aggressive cancer than if you did not have that familial predisposition? So the first question regarding should you get screened if you’re in that family, I would say yes. I think I would at least recommend that you discuss it with a genetic counselor. And we have excellent genetic counselors here at Yale that can talk with you more specifically or talk with them more specifically about their risk and the benefits of determining
that versus some of the drawbacks and so they can make an informed decision. But in general, yes, I would say at least having the discussion about screening would be very important and probably would be of benefit not only for themselves but for any of their children because it is something that can be passed down through the generations. In terms of BRCA 2 deletion associated prostate cancers, yes, those are more aggressive. So they occur at an earlier age. They appear to be associated with a more aggressive phenotype with a higher likelihood of higher grade disease and developing metastases. So it is something that in those cohorts of those families, screening and testing is definitely one of our important evaluations and management plans for those patients. So in terms of screening then can you tell us a little bit more about what screening protocols you follow for men at average risk, the general population and whether that’s different for men who may have a genetic predisposition or men who might be of African American ancestry.
0:07:39.08 –> 0:07:41.495 So that’s a very good question and
0:07:41.495 –> 0:07:43.962 it’s complex and one that we are
0:07:43.962 –> 0:07:45.996 constantly seeking to find the
0:07:46.064 –> 0:07:48.64 right answer to and it is elusive.
0:07:48.64 –> 0:07:50.593 So I would say that there’s
0:07:50.593 –> 0:07:51.979 an evolutionary process with that,
0:07:51.98 –> 0:07:56.018 but the early detection for prostate
0:07:56.018 –> 0:07:59.36 cancer guidelines from the NCCN,
0:07:59.36 –> 0:08:01.346 and we actually are meeting this afternoon
0:08:01.346 –> 0:08:03.49 to try to finalize exactly that.
0:08:03.49 –> 0:08:09.196 Can we agree on a sort of risk stratified
0:08:09.2 –> 0:08:11.12 protocol for who should be
0:08:11.12 –> 0:08:13.04 getting tested at what frequency?
0:08:13.04 –> 0:08:14.992 I would say we do agree that men
0:08:14.992 –> 0:08:17.199 who are at higher risk should be
0:08:17.199 –> 0:08:19.16 tested starting at an earlier age.
0:08:19.16 –> 0:08:22.425 The frequency of testing depends
0:08:22.425 –> 0:08:25.69 on PSA blood testing results
0:08:28.98 –> 0:08:31.815 and it changes somewhat based on age.
0:08:31.82 –> 0:08:33.92 It’s an open discussion of whether or
0:08:33.92 –> 0:08:36.267 not those at a higher risk based on
0:08:36.27 –> 0:08:38.535 genetic or racial characteristics we
0:08:38.535 –> 0:08:41.29 think should be screened more often.
0:08:41.29 –> 0:08:43.05 It’s unclear if they should,
0:08:43.05 –> 0:08:45.378 but definitely we want to screen
0:08:45.378 –> 0:08:47.373 them earlier because they can
0:08:47.373 –> 0:08:49.213 potentially be diagnosed with a
0:08:49.213 –> 0:08:51.43 high risk cancer in their 40s,
0:08:51.43 –> 0:08:53.38 at which point intervention has
0:08:53.38 –> 0:08:56.097 a much longer benefit than if we
0:08:56.097 –> 0:08:57.827 can identify the cancer early.
One of the things that you had mentioned earlier was that because so many of these prostate cancers are indolent, you still recommend screening because PSA is a relatively easy test to do. It’s a blood test. And so the result of that blood test may or may not actually cause an intervention. At what point do you start looking at that PSA and saying, geez, now we really need to do something to investigate further? Is it a particular number of the PSA or is it a trend in the PSA? How do you make that distinction and what’s the next step? For a man who might meet those criteria in terms of actually trying to find prostate cancer earlier, we no longer use strict cut offs for PSA’s. Traditionally we had used a level of around 3 or a PSA of 4 to indicate that a further evaluation was needed. We now really have what we call shared decision making discussions with the patients, with the men and talk about the fact that a higher PSA is associated with a
higher likelihood of having a prostate cancer detected on biopsy, and what we usually consider a cutoff where we would consider biopsy and start that discussion is if the PSA is over three, sometimes over 4. It also depends somewhat on the age of the man, but you also mentioned the rate of rise of the PSA. If a PSA is completely stable that is less often associated with a prostate cancer versus one that seems to be rising consistently, that would be more concerning. However, the most predictive thing still is a PSA that is elevated. So a PSA is elevated over 4 statistically has the greatest predictive rate for their development identifying a prostate cancer in the future. So it’s still a little bit complicated. We’re trying to make it simple, but I think that the easiest way to think about it, if you have a PSA that has elevated over 4, it is worth further discussion with your primary care physician or urologist about what additional steps you may be taking and that
0:11:22.74 –> 0:11:24.528 typically for us at Yale includes
0:11:26.105 –> 0:11:28.38 And then very likely a prostate biopsy.
0:11:28.91 –> 0:11:31.78 So you mentioned this concept of shared
0:11:31.78 –> 0:11:34.197 decision making and talking to
0:11:34.197 –> 0:11:36.723 your doctor about your PSA because
0:11:36.723 –> 0:11:39.549 even if your PSA was elevated,
0:11:39.55 –> 0:11:42.366 if for example you were quite elderly or
0:11:42.366 –> 0:11:45.347 you had a million other comorbidities,
0:11:45.35 –> 0:11:48.31 we actually kind of weigh things all out.
0:11:48.31 –> 0:11:51.033 You know the risk of prostate cancer
0:11:51.033 –> 0:11:53.471 and the treatment of prostate cancer
0:11:53.471 –> 0:11:56.25 might actually be lower in terms of
0:11:56.25 –> 0:11:57.537 the disease itself,
0:11:57.537 –> 0:12:00.111 then the risks of the potential
0:12:00.111 –> 0:12:01.678 intervention and the treatment
0:12:01.678 –> 0:12:03.808 and the the competing risks of
0:12:03.808 –> 0:12:05.58 your other comorbidities.
0:12:05.58 –> 0:12:07.96 Why wouldn’t that discussion happen
0:12:07.96 –> 0:12:10.34 before the PSA ever occurred?
0:12:10.34 –> 0:12:11.345 In other words,
0:12:11.345 –> 0:12:13.69 if you know that you’re never going
0:12:13.762 –> 0:12:15.995 to act on that PSA screening test,
0:12:16 –> 0:12:17.04 why get the test?
0:12:17.72 –> 0:12:19.838 You’re absolutely right and it should
0:12:19.838 –> 0:12:22.243 and so there’s shared decision making is
0:12:22.243 –> 0:12:24.84 supposed to occur before a PSA is drawn.
0:12:24.84 –> 0:12:26.877 The problem is it is not all
0:12:26.877 –> 0:12:28.498 physicians and that burden often
0:12:28.498 –> 0:12:30.198 falls on primary care physicians
0:12:30.198 –> 0:12:32.738 to be able to have that discussion.
But you’re absolutely right. So the first real sort of cutoff is unless someone has we think at least a 10 year life expectancy, we recommend strongly against initiating PSA testing. Where we’re trying to make that cut off because for those men who we do identify prostate cancer, we have lots of new novel treatments that have a lot less of the side effects that many men have been concerned about. Some of those include ablation therapies, focal therapies, things that have many fewer side effects than the traditional surgery and radiation. So we’re going to dive a little bit more into some of those novel therapies right after we take a short break for a medical minute. Please stay tuned to learn more about the care of prostate cancer patients with my guest Doctor Preston Sprenkle. Funding for Yale Cancer Answers comes from Smilow Cancer Hospital, where their liver cancer program brings together a dedicated group of specialists whose focus is determining the best personalized
treatment plan for each patient.

Learn more at smilowcancerhospital.org.

The American Cancer Society estimates that nearly 150,000 people in the US will be diagnosed with colorectal cancer this year alone.

When detected early, colorectal cancer is easily treated and highly curable, and men and women over the age of 45 should have regular colonoscopies to screen for the disease.

Patients with colorectal cancer have more hope than ever before, thanks to increased access to advanced therapies and specialized care.

Clinical trials are currently underway at Federally designated comprehensive cancer centers such as Yale Cancer Center and Smilow Cancer Hospital to test innovative new treatments for colorectal cancer tumors.

Gene analysis has helped improve management of colorectal cancer by identifying the patients most likely to benefit from chemotherapy and newer targeted agents resulting in more patient specific treatment.

More information is available at yalecancercenter.org.

You’re listening to Connecticut public radio.
Welcome back to Yale Cancer Answers. This is doctor Anees Chagpar and I’m joined tonight by my guest, Doctor Preston Sprenkle. We’re talking about the care of patients with prostate cancer. And right before the break, we were talking about the fact that for the most part, many men who get prostate cancer, in fact many men do get prostate cancer, will have indolent disease. Still, screening is recommended because it’s an easy screening test. It’s a blood test. And it can pick up prostate cancer early when it’s most treatable. And it’s been shown in studies to save lives. So Preston, we ended the conversation right before the break, talking about the fact that for many patients, prostate cancer is relatively indolent. You oftentimes will not have problems from your prostate cancer and so weighing the risks and benefits of treatment versus doing nothing and certainly watchful waiting has been a strategy that has been used for some patients with prostate cancer.
So can you walk us through a little bit more of what happens when that PSA comes back, it is elevated and your doctor wants to start looking for prostate cancer? Start there and tell us a little bit about what men might expect in that situation. So when there is an elevated PSA, the first step is to really recheck that, to check another PSA test and confirm that there is an elevation. While the PSA is a very good screening test for prostate cancer, it is definitely not perfect. So there are significant limitations that the normal prostate tissue also makes PSA. So there can be a variety of reasons for a PSA blood test to be elevated other than prostate cancer. So the initial thing would be to repeat a PSA blood test. We have a lot of new biomarkers that can be used in that case as well once a PSA is found to be elevated that confirm whether the PSA is elevated but also can give more precise indications then try to control or correct for
some of those benign reasons for a PSA to be elevated to evaluate someone’s true PSA or prostate cancer risk. There are a variety of them and I don’t really want to list all of them, but your doctor should know and we have quite a few available after that if there still is felt to be some risk. Often, a prostate MRI will be completed. The prostate MRI is a relatively new thing within the last 10 years where we’ve been using it routinely or at a higher rate because it allows us to look in the prostate, see if there are areas that appear suspicious, grade them on their risk and allow us to perform a targeted biopsy so we can really, in a more selective way, sample those areas that are more suspicious. This has been tremendous because it allows us to
more accurately identify prostate cancer

sometimes in a hard to reach area of the prostate,

we would not biopsy at unless we knew that there was something there.

This allows us to know that there's an area that's higher risk and do targeted biopsies at that area.

And so once a biopsy is done, and it’s sent to the pathologist,

the pathologist can say it’s prostate cancer,

but for many men that prostate cancer is different from other men.

In other words, it’s not all the same.

Some men, based on their prostate cancer biopsy, will be given a score.

they’re told,

we can watch this and monitor you.

Other men are given a biopsy,

it’s still called prostate cancer,

but they’re told that they need more aggressive treatment.

So what gives?

How are you making this distinction?

Tell us more about the scoring of prostate cancer and how that affects management.

Yeah, you’re absolutely right.

So we actually have a 5 point scale on which we grade prostate cancer.

That is the role of the pathologist and having expert pathology helped
tremendously to be able to evaluate those. Like you mentioned, those pieces of tissue from the prostate go to a special Doctor who processes them and looks at them under a microscope and they have a standardized grading scale. And based on that grade that is the primary driver for most of our treatment decisions about what to do for prostate cancer. We also now use genomic testing. So this is different than what we were talking about before with testing someone’s genetics and if they have a sort of mutation that’s being passed down from family members, the genomic analysis is actually taking the prostate cancer cells and doing analysis on those cancer cells to determine if this cancer, if it’s more or less aggressive and I’ve been using those tests for over 5 years now and find them very helpful in discussing with patients what their risk may be and helping them determine if treatment is indicated and if so, what are their best treatment options. And so is there a particular cutoff on that five point grading scale that will tip your into one category versus
another in terms of how aggressive you’re going to be with management? Similarly on the genomic tests, is this something that’s a little bit more amorphous, talk to your doctor and kind of figure it out together. Yeah, so I can definitely tell you how I approach it but I would say that this is a very personalized discussion with your urologist or your radiation oncologist or your doctor. But in general, grade one is considered low grade and almost universally all of the guidelines around the world recommend active surveillance or a deferred treatment, meaning the treatment is not needed right away. Grade 2, some of those men can be on surveillance, some of them should probably consider treatment, and that’s where the genomic testing in my practice comes in handy because it helps us identify which of those grade two is considered favorable intermediate risk, which of those patients we can continue to observe versus which of them we think their cancer will progress and we should treat them early.
And then grade 3-4 and five, those are our unfavorable intermediate and higher risk prostate cancers. Those typically require treatment with rare exception. And so let’s talk a little bit more about treatment. I mean you had mentioned before the break that historically some of the treatments are associated with side effects that need to be considered when you’re thinking about the risks and benefits of therapy for prostate cancer. And you also mentioned that now there are more novel therapies that are coming out that have fewer side effects. So can you kind of walk us through the potpourri of treatment options that men who have prostate cancer might think about? Sure. I will give you a very abridged version because this can be a very in-depth discussion. But yes, I think as I mentioned at the beginning, your prostate cancer is a disease that grows relatively slowly. Most of the time we are treating men for prostate cancer not because we are worried in most cases, and this is primarily
talking about localized prostate cancer. So not high risk aggressive metastatic prostate cancer but for men with localized prostate cancer we are typically doing our treatments to see a survival benefit beyond ten years, so most men will live 10 years. So we’re again talking about treating those younger men or older men that are healthy and have at least a 10 year life expectancy because the survival benefit really materializes 10, 15, 20 years in the future. It’s not something that happens right away, but because of that it is very important to consider what the side effects of these treatments are and what the impact of these treatments on someone’s quality of life is going to be, because it is something that they will be living with for that extended duration of time that we are trying to achieve by doing treatment for their prostate cancer. So our gold standard therapies are surgery to remove the prostate, radiation therapy to really treat the cancer where it is, a non-surgical therapy and as you mentioned, we have these newer treatments or ablation.
therapies where we use energy of some sort, could be heat, could be cold, could be electricity to try to destroy the prostate tissue within the prostate. So we leave the prostate in place and we can then destroy the prostate tissue that. With the revolution in MRI imaging and targeted biopsy, we now along with this have much better information anatomically about where prostate cancers are located if they're located in just one part of the prostate, in multiple parts of the prostate. And we can then tailor our treatment using these ablation therapies to potentially be just one part of the prostate or even the whole. The reason that these ablation therapies are preferred in some cases is that they are not associated with many of the common side effects or definitely at much lower levels than are that we see with our traditional treatments like surgery and radiation. So much less urinary incontinence, much better preservation of erections and sexual function after treatment, many fewer episodes of toxicity or long term toxicities.
So I think it’s a really great new area of exploration. I do have to put the caveat in that these are relatively new technologies and our national organizations do recommend that these procedures be done as part of a registry or a trial. Fortunately, we have several trials that are open as well as registry. So we have many of these treatments available for our patients here. It sounds like these new therapies have significantly lower side effects. Do we have data to suggest that they are equivalent in terms of outcomes to our traditional surgery, radiation therapy, et cetera or is that really why these need to be done in a registry study because those data are still lacking? That’s correct.

And so our short term, we have short term follow-up data. We are following these patients very closely. Typically we are doing repeat biopsies after treatment to evaluate for complete treatment success and in those studies there are small numbers of persistent cancer, but we can then retreat them.
And so it is a trade off with an improved quality of life and a very high likelihood of complete cancer control. But it is a higher risk of needing additional therapy within a couple years than you would have after surgery or radiation. But interestingly, if we look at longer term studies, there are some studies in Europe that have been done now with about 10 years of follow up. And instead of looking at a biopsy a couple years later, they looked at what is the likelihood of requiring a salvage therapy, so a more significant therapy to treat recurrent or residual prostate cancer. And in those studies there was not a significant difference between men who had surgery, men who had radiation or men who had these focal therapies. So that’s definitely preliminary data. This is an area that we are learning more about. But I think it’s safe to say that ablation therapies are not going to be as effective as a single treatment as radiation or surgery, but they can be repeated and they
have a much lower risk profile.

Doctor Preston Sprenkle is an associate professor of urology at the Yale School of Medicine. If you have questions, the address is canceranswers@yale.edu, and past editions of the program are available in audio and written form at yalecancercenter.org. We hope you’ll join us next week to learn more about the fight against cancer here on Connecticut Public Radio. Funding for Yale Cancer Answers is provided by Smilow Cancer Hospital.