Prostate Cancer Without the Panic: How to Understand Your PSA, Your Risk & Your Real Options Transcript

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Doctor Personalities in Medicine

Well, doctor Geo Espinosa. It's always so fun to hang out with you. You are a man. I mean, yeah. You make everything so much clearer. You know, challenging things. And.

But you bring that awesome humor. I still still remember at a conference. Yeah. We're up there on the stage, you and I. And you're talking about the difference between a urologist and oncologist and the surgeon and got the one is the jock and the other.

Yeah. Do you mind just kind of going through the different personalities? Well, yeah. So the point I wanted to make is how we all get attracted or a certain profession.

So the orthopedic surgeon was an ex jock, right? He he just didn't make it to become a professional athlete. Well, become a become an orthopedic surgeon.

You know, for the most part, oncologists are on the spectrum. And this is why I think that a lot of patients struggle with oncologists because they want warm and feel they want connection.

They want to be heard and know the you know, it's somebody on the spectrum, particularly at a high level end of the spectrum. That's not going to happen.

And it's unfortunate, but that's the way it is. Urologists sort of always have fun, right? These are fun doctors. What are we talking about all day? You know, prostate and penises all day, every day.

So it's a little bit more a little bit more. Lacks a little bit more fun with particularly those that are true to the science, of course, and doing good work, but it's just more relaxed, laid back and so forth.

So it's always fascinating to me how different branches of medicine attract different type of doctor or personalities. And you're in nature path doctor specialize in prostate cancer.

And this is something you'd been done been doing for a lot, a lot of years. So it's a little bit challenging. I know when patients come into me kind of navigating that whole journey.

You know, they're different therapies that that are thrown at them, you know, from their oncologists, from their surgeon, from the radiologist. And then also kind of knowing a little bit somebody does should I do biopsy on the biopsy.

They kind of do grading. They do all these different things. Do you mind just kind of walking through first in regards to what the different diagnosis means in regards to prostate cancer and the level of concern?

Well, thanks for that, Michael. So yes, I'm a natural path doctor that focuses from an oncologist perspective only on prostate cancer. Thank God I did that because I'm not Michael Carville.

Right.

Prostate Cancer Types and Risk Levels

And many like you, you guys are way too smart for me. There's no way I could do every cancer and be really good at every cancer and all the treatments that go along with it.

I mean, this that was just too, too much for me and overwhelming when I figured that out over 20 years ago. So I went into urology and from an ecological perspective and let me just stick to prostate cancer so I could know it well.

And by the way, I still get amazed with new things that I learned. People would say, aren't you bored with that? Isn't it just like the same thing over again?

No. And here's why. And this is going to answer your question. If I have ten prostate cancer patients in my office, they're not all the same. Prostate cancer is not prostate cancer, right?

Prostate cancer. You have different levels within advanced prostate cancer Michael advanced this five types. And we are going to an advanced very high PSA progression.

There's about five types. And that's only advanced. There's the intermediate risk. There's a few levels below that. And there's the low risk. And there's a few levels below that.

So it's a full full spectrum. So what you try to do is figure out okay, what is the cancer that they have specifically. And how do you create an unfavorable tumor ecosystem in their body so that they can not only survive, thrive when people say how successful are you with prostate cancer?

Define success. Well, being alive in a by itself is not it? Being alive and thriving despite their situation. That's what we try to focus on. So there's all these multiple levels.

So it depends which one we're talking about. All in all I think that there's a lot of treatment. There's there's a lot of conventional treatment. And the goal is not only to do natural.

Maybe sometimes that is the way we do know that there's low risk prostate cancer called Gleason Grade one. People go on active surveillance. They they are not going to die from prostate cancer.

Sometimes you have a low intermediate risk prostate cancer. They are unlikely to die. Just yesterday alone I saw a patient 79 years old with. So this is interesting actually 79 years old.

His PSA within an eight month period went up from 4 to 21. And I'm scratching my head. How can that be? Mari shows what intermediate period three. Maybe leave it alone. Particularly in a 79 year old.

He still has a Pet scan, which is a very good scan. And this is. I also want to say that if you have to have a cancer, probably prostate cancer don't want to have.

And if you want to, if you have to have it in 2026 is in 2027. This is the best time to have it. Just because there's so many good things out there the technology, the diagnostics, they're all much better.

So his PSA, 79 years old, I don't want to touch a 79 year old with medical therapies for prostate cancer. I'm going to do great quality of life. By the way.

This guy is in great shape. Parents live to 90, 95 and 100, so he's going to live for probably another 20 years. I don't want to touch him. He his PSA goes up from 4 to 21 power at three.

Am I missing something? He gets a biopsy. Low intermediate risk. Gleason grade two. Well, I'm not treating that. His decipher. Decipher is a genetic score that gives you an idea.

They take the tumor biopsy and they analyze it, and they give it what's called somatic genetics. Right. So genetics on the tumor itself, low risk. And we're talking treatment for this guy.

I'm not. But then this PSA rising like that is always troubling. When PSA rises like that is a reason. Towards the end of the consultation he says, oh, I forgot to mention that in the beginning of this I started to testosterone replacement therapy.

Okay, now we got it right, not that testosterone. And we're going in different directions here, but I just want to make the point. Not that testosterone causes prostate cancer, but it can reveal it.

It can reveal it because the PSA will go up. And for the most part, the PSA goes up for benign reasons. Not there's more activity in the prostate. So to make PSA you actually need to stop.

So now the testosterone that he was getting is increasing the production of PSA going in his bloodstream bringing everything up. So the point is this is just one case, right.

Maybe the types of patients that you see are more advanced prostate cancer. Well that's a whole different thing. Even dietary it's different. So let me pause there because I don't want to take off the stage.

And I want you to ask questions that you think your audience are going to want to know about. Well, talk to me a little bit about more about PSA, because that is so confusing for people.

You know, they think PSA directly correlates with their, you know, aggressiveness of cancer. So if you see it go up, then they think, oh, cancer spreading everywhere.

And here you're saying that essentially if you are then on hormone therapy your PSA is going to go up because testosterone is needed to produce a TSA.

But it doesn't mean that cancer in itself is advancing. I'm I I'm understanding that. Right. Correct. We can have a whole show on PSA. Michael, let me try to summarize that for you.

First of all, PSA stands for what we always joke patient stimulated anxiety. I don't know of a biomarker that induces more anxiety in men than PSA. They can have cholesterol through the roof.

They could have triglycerides through the roof. These are biomarkers for heart disease that will not cause the anxiety that PSA does. It is remarkable when I analyze this.

What's the story with PSA? Let me break this down for you. PSA overall is a good prostate health biomarker, is not a great biomarker for prostate cancer okay.

So when PSA goes up is telling you something about the prostate. And if it does go up rapidly and if it does go up with a high velocity, the changes like this last patient we just spoke about without the Tati Tati aside, that would be a red flag and something is happening.

So it's good, is inexpensive, is accessible. So I don't want to throw you never want to throw the baby out with the bathwater. It's good.

Understanding PSA and PSA Density

But it's not great for prostate cancer. So some people come to me with a PSA of 100. They have prostate cancer. And they're telling me, well, PSA doesn't matter.

I know it's 100. No, it matters matters when it's that high. So anywhere between zero to about 20 it may or may not matter. So the patient has a PSA of about 20.

It could be for other benign reasons. It could be BPH and enlargement of the prostate. It could be that they are on TRT or their testosterone to just rose for whatever reason.

It could be that there's inflammation around the prostate. It could be that they, you know, went for a bike ride for four hours and then right after they got a PSA.

Could be many benign reasons above 20. And that's not to say that low PSA. This is the other tricky point. I've

seen patients with low PSA. I'm talking about 1 or 2 with advanced prostate cancer.

Okay. So it could it's a full spectrum. It's about how to interpret it correctly. And there's other biomarkers now available that you can say that you can tell whether it is prostate cancer driven or, or driven from some benign reason.

Lastly PSA density is very good. PSA density is a very good biomarker. Again, inexpensive for the most part. What is PSA density? You take the you take the PSA divided over the size of the prostate.

So you do need an MRI and PSA density. The cutoff is roughly 0.15 okay. So you take the PSA over the size of the prostate. Cutoff is about one five. If it's above 0.15, it suggests that there might be prostate cancer related.

If it's below 0.15, it suggests that the high end PSA, or the rise in PSA is related to some other benign reason. I like my cutoff to be about.10. So between 0 and 1.15, because I don't want I don't like to drop the ball on any patient if I need if I need if they if I need to find out.

And if they do have clinically significant prostate cancer, I want to know. So I kind of have my own methodology to figure those things out. But PSA is good, not great good for prostate health.

And it is is good, not great for prostate cancer. And this is something because I know when patients come to me and they've been to their urologist, none of them talk about PSA density.

So do they have to request that from their urologist. Or how do they go about getting that measurement? These are the things that make me scratch my head.

And probably I've lost my hair due to the stress of these kind of things happening in the world. Let me give you an analogy. Cardiovascular disease. If you want a nonintervention way of determining if you're at risk for cardiovascular disease is not cholesterol, is not even LDL might be part of the equation.

But is Apple lipoprotein B right? Isn't there enough evidence to I mean, are we practicing evidence based medicine or are we not? If there, how can you not order an April lipoprotein beat?

Well, I see tons of lab work without a protein be right, even from their cardiologists. PSA density is that. What are we doing? What are we doing? Unless they they don't have an imaging. Right.

Because you do need and the imaging should be from an MRI, not the ultrasound. So the the volume and the size of the prostate should be from an MRI, not an ultrasound.

It's just more accurate. So either they just haven't had an MRI and and they should. But even after they had have an MRI often saw oh oftentimes I see and you see the PSA density is not part of the equation where this is a, you know, low hanging fruit.

This is like come on, this is way better and more accurate than just PSA alone. So why is that happening? I don't know the same thing with that. It's happening with cardiology and AP protein B I don't know why that's happened.

Yeah it's fascinating. And you mentioned other terms like pirates and grade and what I mean keen navigate to go through that a little bit so people understand.

So there's so the pirate score is a score from the MRI that really the MRI is trying to tell you. Should you biopsy or not. Do you need to biopsy this guy.

Of course people come to see me like they don't want a biopsy. So I have a system in place. So to help them navigate through that and say, well, you do need one, there's no other way.

Unfortunately. Or this other piece of well, no, we can. You don't need it. The MRI pirate score is a scoring system

from 1 to 5. If the higher the number, the more likely that there is clinically significant prostate cancer in them that they should, you know, figure out, screen for or get a biopsy.

So if it's a period 1 or 2, you typically leave these guys alone. It's highly unlikely that they have a clinically significant prostate cancer. If it's a three it's like a neutral thing.

It depends on other things. So this patient 79 years old pirate score three I want to leave them alone and plus everything else. And certainly after we found out that he was on TRT, I would have probably not even biopsied him.

So three is like maybe, maybe not. And oftentimes they're left alone for than five are more significant. And these guys need to be looked at more closely to find potential clinically significant prostate cancer.

And then we have things like Gleason score and also, you know, staging and grade, you know, but where do they play a role. So that's from biopsy pathology.

So after they get a biopsy they get a greeting system. Really the grading system that it's there's Gleason scores there. But a lot of times is Gleason grade 1 to 5.

So Gleason grade one is, you know, very indolent. They found something very indolent, likely a Gleason score six, which is very low grade. Leave these guys alone.

Gleason grade two is low intermediate risk. So the Gleason score is they combine two numbers and they add them up. So the Gleason score seven for example it could be a three plus four.

So they find more patterns of in this case three than four. Or it could be a Gleason score of seven four plus three. So a Gleason scored three plus four is low intermediate risk.

And typically that's Gleason grade two. Gleason Gleason grade three is high intermediate risk or more sort of aggressive intermediate risk. And that's a four plus three.

Then Gleason score for Gleason grade four is eight. And Gleason Gleason grade five. Gleason grade five is typically a Gleason score. That's nine or higher.

So the higher the Gleason score, the more aggressive the the disease is. And that is essentially from the biopsy. And seeing how many of those when they do the biopsy, how many cancer spots are cancers that they're identified.

Correct. That's correct. And it's very important to reinforce that you only get this Gleason grading system from a biopsy. What do I say that sometimes I get reports that somebody did an ultrasound on me and they gave it a Gleason score.

That's not accurate. You could only get a Gleason score from the pathology from a biopsy. And people have a lot of concerns when the second needle into an area that there may be cancer.

And I hear you have that, you know, seeding, you know, from the needle and you're triggering inflammatory response, you're kind of opening up and encapsulation that, you know, the cancer has been kind of capsular.

And I opening up a whole into that. Yeah.

MRI PIRADS, Biopsy, and Seeding Concerns

Can you speak a little bit about those concerns, the seeding question, Michael, I wish I had $10 every time I had that question asked, because if I did, I'll probably be doing this interview from the Caribbean on a beach somewhere.

That is the million dollar question. Seating and spreading of cancer from biopsy. Here's the bottom line. The bottom line is that in for the next probably decade, it is unlikely that one can diagnose a patient for prostate cancer without a biopsy.

So it's not going anywhere. So if you're really interested in knowing if you have prostate cancer and what type you have, then you're going to have to undergo a biopsy.

That said, there's this seeding concept where if I put this needle to this tumor, seeding and this sticking of the cancer cells are on the needle and as I pull the needle out, is going to bring some of that cancer out of the out of the prostate.

And then that is potential that creates a potential to spread cancer. I think that is a reasonable theory. It's a reasonable theory. I think that there's more evidence with that, if I remember correctly, from other cancers, maybe breast cancer, and in animal studies that that is potentially possible.

So I don't rule it out because, you know, everything starts from a theory. And Michael, let's be honest here. Who's going to study this and why. Why would we ever study this.

Right. So we have to look at it that way. That said, I've seen now many patients post biopsy and I personally cannot say or have a good argument that because of this biopsy, this bread or not spread, I don't I can't say I've seen that or has been that evident to me, but I can't say it hasn't either.

Right. And some cases where there's a recurrence and things like that. So what do you do or are there different protocols, something for people that are concerned about it, whether it's theoretical or actuality?

Yeah. Absolutely right. Yeah. Who's going to spend money on studying this. You know, nobody. And they come up with a different type of way of, you know, diagnostic way.

Then, then maybe at that time in order to be able to push this other way of diagnosing. But until then, probably not. So are there certain protocols that you suggest for people that are concerned about this issue during a biopsy?

Or, or do you just kind of say, hey, we you're going to be okay? You know, we we don't have proof about this. And, you know, please go ahead and move forward with the biopsy.

I put all these patients on protocols right away. Even before that, it's all to me. It's all about creating an unfavorable hostile environment to cancer cells in the body.

Right. Cancer cells like certain environment. You want to make it not that right unfavorable. And that starts at the time where the say is high and you are undergoing a biopsy.

So that starts there. We could get into those details in a little bit because there's nothing specific to around biopsy in my mind anyway. There. And I know there's protocols out there that some people use around biopsies.

I don't just because let's get you right on the right protocol that that you would do if the biopsy result comes back positive. Let's get you on it right away. No harm, no foul.

And you're going to feel better anyway. So that's we can talk about those details in a second. But let me say this. This is interesting I don't know. And I've interviewed quite a few people around this on my podcast, that doctor O prostate podcast.

And I always ask a question, is there a future that where a biopsy is not needed, that we can use other things to determine that cancer? Why do I ask that question just to be provocative?

No. In Germany they did a study, very elegant study, that they looked at a group of patients without biopsy. They looked at their MRI and a Pet scan, no biopsy versus a group that did not do biopsy.

And they tried to determine if there was any difference in finding significant prostate cancer after after they got either imaging or biopsy. And there was actually no difference.

It's a group that did the same, a Pet scan and the MRI. And so doctor Mark Burton, professor emeritus from London. Brilliant. And he has a lie. He says he promotes. He's huge around imaging.

I've had him on twice. So good. He says if it talks like a duck and walks like a duck, it's a duck. If the imaging shows that is both a Pet scan and MRI combined, if it shows if it lights up to a certain degree, then it's likely prostate cancer, right?

So is there a future without biopsies, prostate biopsies? I asked another guy. I said, you know, is there a future? He says, I don't know, because from the tissue you actually get good information.

Also, you get all this genetic information that's useful. But there is a future, hopefully sooner than later, where the technology and the imaging is so good that they won't have to do 24 snips or cores, or 12.

They could do probably 1 or 2. So it so there's a higher likelihood that there would be less biopsy course taken in the future than no biopsy at all. Yeah.

Because he's still like you're saying the you're looking at the genetic mutations and genetic or different drivers. You can gain a lot of that information obviously from the biopsy which will then determine even from us as doctors, we can then kind of form a protocol, you know, to put pressure on these genetic drivers, you know.

So absolutely. Yeah. So yeah. PS you mentioned PS A you know, what is that something that every urologist does, or is that something that the patient have to kind of push for a little bit, kind of like that, that the PSA density test, it's all about self-help advocacy.

And so it's very interesting because we are at a stage and phase where there's a lot of discussion on shared decision making between the patient and the decision. Right.

That's a very interesting concept. I believe in the empowerment of the patient so that they ask better questions when they come into the office. Right.

And had another patient come in this past week who said, I have this my PSA high for his age. He's 52 years old. His PSA was nine, which is high. No urinary symptoms.

But the pirate score on the MRI is a pirate two. And my urologist asked, what do you think? You know, he says, what do you want to do? It's like, why are you leaving it to me?

The patient says, you know, you're the doctor. So it's interesting because sometimes you do want to the doctor to just say, hey, this is what we need to do, and other times you don't.

I think at the end of the day, it behooves the patient and and regular people. We are, you know, at an age where you can find information more easily.

Yes, you can find inadequate and accurate, accurate information as well, but there's also ability to find good information where you can ask better questions and be part of that shared decision. So the patient went back to your PSM.

In my perfect world and my perfect world, I would get an MRI and scan in every patient even before a biopsy. That's not what's done. It can't be done because then you're going to have to battle with your health insurance.

So pay for the PSM, Pet scan health insurance will pay for PSM, a Pet scan after you've been biopsy, and sometimes not even it sometimes is. If there's a recurrence.

They have prostate cancer. They get treated PSA recurrence rises up again, then PSM a Pet scan. And that's when a lot of health plans will actually pay.

And only that circumstance I would like to know before what I have can it be overkill sometimes. So maybe the PSA is low. Parrot is not that high from the MRI.

And look PSM apex can which really tells you if there is anything outside of the proxy that we should be concerned about. Maybe in some circumstances there's little likelihood that there's something outside of the prostate.

But the PSM, a Pet scan shows it seems to be really good to tell us what's in the prostate as well, not only with what's outside the prostate.

Future of Imaging and Treatment Decisions

So if you can, you get a PSM, a Pet scan and an MRI. Patients are willing to pay for it out of pocket, which is worth it if you can afford it. Otherwise you can kind of battle it out with your insurance company for them to cover it for you.

But it is a very useful other biomarker along with MRI to determine number one is anything is outside of the prostate. Number two, even with what's in the prostate, it could give you some idea of how clinically significant it really is.

And then now when you have a good understanding of what's going on, you've done the imaging, you've done the biopsy, you had your score, you have all of this information in front of you.

And now there's a question, what should I do? Yeah. What is the appropriate type of of course of action. And you know, you get and different forms of radiation, you know, whether it's kind of the whole floor or you're going after it very, very targeted.

You have surgery, you have androgen deprivation therapy. And then obviously there's always chemo if something is really gone wrong, you know. So how in your mind, I mean, when you are then presented with the evidence of what's going on, how should you then navigate, like you're saying, that kind of shared responsibility, how should a patient think about what would be the prudent thing to do?

So the the answer of course, is it depends. Right. So the patient high PSA without a biopsy, they already want to go into the conversation of well if if I do a biopsy and it's positive what do I do?

Then I said, buddy, I can't tell you that because it depends. And it could go and you know, really depends what you have. So let's go through the full spectrum.

If you have low risk prostate cancer, you highly unlikely to die from it. And you actually are more likely to die from a heart attack than prostate cancer.

So they they you should be on active surveillance or what I call pro active surveillance. That is intensive lifestyle interventions, which we can go over and be like, but you do these things to create an unfavorable ecosystem to the tumor environment or to the prostate environment.

Right. So that's number one. Let's just say it's low intermediate risk. Listen, grade two should I do something. Maybe maybe not. There is evidence showing that those with low intermediate risks we're talking at least in grade two Gleason seven three plus four that they many of them are unlikely to die from their cancer as well.

And they may be an A candidate for proactive surveillance as well. Right. And many of my patients I have are in that situation. Once you go above that two Gleason Gray three and so forth, I would say that a treatment should be applied, a medical treatment.

The other thing is this many of the research shows very clearly that in patients and active surveillance who choose treatment, don't do it for biological reasons, don't do it because of the biology of the prostate cancer and is progressing.

Do it for psychological reasons, right? So once the cat is out of the box for some patient personalities and they say and the word, the C word comes out, that is just way too anxiety provoking.

And they get treated like I need to get rid of this, right. So and I'm okay with that. I just want patients to make an educated, well informed decision.

I'm the same. I mean it because sometimes it's just you have that monkey on your back, but the C word and you mentally, you just want to get rid of that mic on the back, whatever that means, you know?

And so then you just honor that, whatever that may be. Absolutely. I'll give you a quick breakdown of the options because there are many. I just came back from a Michael is amazing.

I'm getting asked to speak at these very conventional medical prostate cancer conferences, which it only took 20 years to get those type of invitations.

That's all it took. But man, they are they are all in with what we do and they want to learn more. It is. I keep pinching myself. So I just came back from a focal Therapy prostate cancer conference giving a talk.

All right. Vocal therapy is one of them. There's tons of them. What is focal three focal ablation therapy. What does that mean? You leave the prostate intact and you only treat the tumor itself with a little margin around it.

Right. All sorts of technologies to do that. You have heat in the form of ultrasound, whether it's transfer throw through the penis or through the rectum called Haifa.

You have you have cryo, which is you freeze well with cryotherapy. You don't freeze the tumor and the margins. You freeze half of the prostate. So it's you, you you freeze the whole half.

You're not treating just. But it's still considered focal ablation therapy. So you leave the other half alone. You have IRA electrical paresis, which you actually electrocute the tumor.

So you put for prawns around the tumor. You actually electrocuted it there. There's many therapies. So that's focal therapy for the right candidate, which is not the higher grade yet.

I think it is. I just introduced the thought a couple of thought leaders on that. And I'm like, come on, tell me for higher grade that this is available please.

Because this is it has to be it doesn't make any sense. It's like, not yet. We we have to study it. I said, well, okay, it's not study yet, but I'm a patient.

I'm Gleason nine. I'm not going to do anything. Doctor so-and-so, would you treat me? I'll take my chances. What do you think? I asked them, what do you think? Is it?

He says, I do think that it's going to be if they make a well informed decision that you can treat a Gleason nine, assuming that there's nothing else else outside, but they're not ready to move forward with vocal therapy in that treated with focal therapy with higher grade disease.

Then you have radiation. Radiation has come a long way. Now there's a possibility of just treating the prostate. It used to be that the external beam radiation around the whole pelvic area, which now you're exposing the radiation to healthy tissue, which brings about other problems.

The problems are on the bladder called radiation cystitis, where now you have all sorts of urinary symptoms,

secondary cancers from that. Now they've done a very good job of treating just the prostate without hitting the rectum, because they put a spacer between the rectum and the prostate to separate it, to hit only the prostate.

So radiology has come a long way. And of course, as removal of the prostate, which I have to say, there's just a lot of good surgeons out there. But I'm in a homogenous situation.

I'm faculty at NYU, I'm in New York. Everybody from across the world, globally, come to some of these institutions to get their prostate removed. Because these are high volume places.

There is a chance that you go to a low volume place and the results are not going to be the same. So buyer beware because it really the learning curve could be 50 about 100 before you become really good at this.

Treatment Options: Focal Therapy, Radiation, Surgery, and ADT

And you know the guys that the the surgeons that I'm familiar with have done many thousands that said that's come a long way with the robotic surgery where they can spare nerve so you can still have your erections afterwards.

That's come a long way if you go to the right surgeon. So those are the big three. And later more advanced prostate cancer than we took in hormone deprivation therapy.

We're talking about taxol as a chemotherapeutic agent. We're talking about things like which is like radio particles type of treatment and immunotherapy, all sorts of things that come way later.

Triplet therapy, where they do hormone therapy under deprivation therapy, and those and Taxol that comes way later on, more advanced disease. And then there is hardcore chemo drugs like any other cancer, if it's very advanced or what we call neuroendocrine prostate cancer.

And so talk a little bit about the androgen deprivation therapy or hormone blockers. When should they be incorporated. Because it seems like that is an option that is thrown quite early on for for an individual sometime hormone deprivation therapy is chemical castration where your testosterone goes down to zero, almost zero.

No, no man really likes that. Okay. You you you are feeling different. More fatigue a little bit, perhaps more emotional. I always say, Michael, I always say, you know, being witnessing.

Right. So two daughters that went from, you know, not having mentees when they were very younger to older and then a lovely spouse who went through her menopause and then seeing a lot of guys.

On Andrew deprivation therapy. My conclusion, Michael, is that you become more of who you really are when there's a big shift in hormones, whether it's very high or very low, you become more of who you are.

So if they are the angry type, they're going to be more angry after home. You would think they're going to be everybody's the same. No, they're going to be more angry.

If you're the emotional type, don't watch that sad movie with your family because you're going to be bawling. That sad scene with the father loses it.

So whatever it is, you're going to ball, right? So you, you become more of who you really are. So hormone deprivation therapy comes with a kind of stalling because there's so many elements.

I've been through a few people now as hard questions not to be provocative. I just we need to know. Hormone deprivation therapy oftentimes go in tandem with radiation depending on their how their risk of disease.

So if it's higher risk based on a few tests then it's hormone deprivation therapy. And with the radiation, the question that the patient needs to ask is very important is this standard hormone deprivation therapy around radiation is two

years.

And I've asked a question why? Why two years? Why not one year? When not six months. Why not three months? What are we trying to accomplish? Is it that the hormone deprivation therapy is making the tumor more radio sensitive?

Right. So now the tumor is more vulnerable because of the home of deprivation therapy? Or is the hormone deprivation therapy doing its own thing? Because if it's the form or not the latter, why two years?

The answer that I've received, these are the thought leaders in the field is, well, it used to be three years because there was a study that studied it for three years and out of Europe, and then there was a study that studied it for two years.

And so it became two years. Now there are studies that are suggesting one year. So I'm saying, okay, so based on what you decide to study, right, this is what you do.

So why not six months or three months since we seem to be heading in that direction? And if it's around the radiation, then how long is the radiation therapy effective after the actual treatment?

Let's do it around that. Why not three months? Four months? What do I say to that? I say that because it is a reasonable conversation to have with your decision about, hey, can I do this for three months?

Can I do this only for four months? Not two years or one year? Very reasonable. This is not unscientific at all. So that's number one. Patients need to know that with more advanced disease, oftentimes they leave them.

They leave patients with around EDT for a longer period of time, two years or so. The the number one question I ask my patients to ask their oncologist is the following.

When would I when will I be off of of the radiation of the ADT? When will I be off? One year, depending on what? What are you looking for? Here's why.

The longer you stay on these hormone deprivation therapy treatments, the higher number one, your quality of life may be diminished because you don't have testosterone.

But number two, there's a higher likelihood of creating castrate resistant prostate cancer, where now the hormones are not working. The longer you're on these, the the the higher likelihood is for the patient to be cause cancer resistant prostate cancer.

You want to try to avoid castrate resistant prostate cancer by any means necessary. One of the ways to do that is by doing intermittent ADT if you needed in the first place, intermittent on it for a period of time, things look good off of it, and depending on how things progress, PSA or whatever, then we'll put you on or not put you on.

So there's protocols that I have for patients who were on it, no longer on it, that are natural. And in order to try to keep off of it for as long as possible.

Yeah, a lot of that, a lot of that. And just kind of to wrap up a little bit. So lifestyle wise, you know, what do you suggest? You know, what are kind of some of the first initial changes that an individual should, should go through.

All right. So there are six six elements to the soil or the eco system or on the tumor that I'm trying to target. Right. So number one is the nerves. The nerves are part of that microenvironment in prostate cancer.

You remove the prostate with the nerves. You see by the way, 80%, 80% of the biopsy tissue of the pathology tissue that's observed 80%. You see it on the reports.

The pathology report shows her neural invasion 80% of the time. The urologist is going to say, and I'm not knocking

the urologist because I don't think they know.

They're going to say, well, that's an incidental finding. It's not significant. Not when you ask the natural, holistic guy is this just doesn't make sense.

What have they found in prostate cancer? In states that have cancer, the nerves are thicker and more dense versus those that don't have cancer are smaller and less dense.

Right. So the nerves around the prostate is part of that microenvironment. So how do you manipulate that? How many people have you seen Michael. Just again yesterday.

Patient from Tennessee 15 years ago. You were 50 years old. Yeah. Pretty advanced cancer. 15 years later he was doing great. And what happened man, what a horrible divorce.

Horrible divorce. You know, my I'm a pilot and my come back home and I find out that my wife is cheating on me. And then we have a daughter. And it was brutal.

And I had to pay all these lawyers and. Right. That's the nerve around the prostate being affected. Right. So nerve nervous system regulation is how you deal with that.

And I think people can just there's a lot of information out there on that. There's a gut microbiome very important to keep that healthy. There's the immune system.

Keep all these T cells and natural killer cells nice and healthy, ready to go right in. Lowering chronic inflammation is another part of treating the soil.

Lifestyle, Exercise, and Finding Dr. Geo

So that's so we're dressing these things. Then the question is how do you address all these things. Right. So in my mind the pillars are nerve system regulation.

It's good sleep to better sleep because everybody's like good sleep I struggle with that. I'm not saying for you to sleep eight hours a night overnight a little bit better, a little bit better each night.

Sleep, exercise, prescriptive exercise. I'm not talking 10,000 steps a day. That's not fitness. That's good. It's not fitness. We need to be fitter and and so that this microenvironment thing is more favorable towards you and your longevity and not the cancer, nutrition, food and nutrition.

I don't call it diet anymore because I just don't like that word. And I don't like the first three letters of that word anyway. So I call it food nutrition and and targeted supplementation, targeted dietary supplements.

Michael, if you ask me. Right. I want to give the most bang for my book. Right? I want the most bang for my buck with what I do. What is the one thing that hits all these things?

The gut microbiome better, immune system lower. What is the exercise? We're not moving beyond exercise. If you cannot exercise the way I'm asking you to, Michael.

And this is going to sound crazy to a lot of listeners. We're not even touching diet. If you cannot exercise a certain way. Right. Diet if the exercise is a problem.

But tell me about die or is it 50% less of what you already do? No, no, no. But what are the foods? He has a food rating system that I created. But can we get deeper and we're not getting deeper.

You need to exercise and move your body because that hits everything and everything gets better, including your sleep. If you exercise a certain way, we're not doing it.

And that's sometimes the choke point for many patients. And then targeted dietary supplements to here would deal with the inflammation and immune keep the immune system strong and things like that.

But that and I seen you in the gym doing your deadlifts, you know so you I know you walk your talk so walk by talk. That's right, that's right. Deadlifts and barbell squats.

Well you know all the comments. Watch your back. Be careful with your back. You're going to hurt your back. No no no no no no no. Stranger in my back.

Yeah exactly. The fear is what keeps. First of all you don't want to do it. And second of all, now you have fear around this. So why would you do it? No, no, no, you got to overcome that.

And you got to get in the gym and you have to do it. And it's non-negotiable. Love that. Well, you obviously the amount of information that we can go through and pack is I mean, you have your own podcasts, so where can people find you and kind of listen more to what you do?

Well, you're very kind, Michael. And again, thanks for the invitation. Doctor geo.com. So Dr. geo.com everything is there. That's the hub. So you can find information on the podcast.

Newsletters that I have are three Thursdays every Thursday to put something out relative to for the most part prostate cancer, prostate problems and male longevity.

And a podcast is Doctor Geo the Doctor Geo Prostate podcast. Thank you so much, Michael. Well thank you I'll always always a pleasure. Thanks so much.