Kendal Williams, MD: Welcome everyone to the Penn Primary Care podcast. I'm your host, Dr. Kendal Williams. So since I came back to primary care medicine from doing a lot of hospitalist work, one of the more challenging issues I faced, is managing lower urinary tract symptoms in men. I have a, a lot of older men in my practice and these things come up all the time and I often refer them to a friend and colleague, Dr. Bill Jaffe, who I worked with at Presbyterian Hospital and now work with out at Radner. And I'm always a little nervous about whether I'm sending Bill patients that I should be working up myself or, so I decided to bring him on the program and talk to him in more detail about some common male genitourinary issues, including lower urinary tract symptoms.

So Dr. Jaffe is an Assistant Professor of Clinical Urology at Penn. I know he practices down at Presbyterian. I think he does, he does some work at HUP as well. He is at the Radner facility and does a range of general urology. And Bill, I know you had also have an expertise, but I'll, I'll let you speak to it, but thank you for coming on the program.

William (Bill) Jaffe, MD: Oh, thanks for having me, Kendal. We, we've known each other a long time and I have a lot of friends in primary care. I've been at Penn for a long time. I did medical school, I mean undergrad, medical school, residency, and, and now I've been back on faculty since 2008. So it's really nice to talk to people that I've known for a long time.

And, and hopefully I can add something that'll be interesting to you guys.

So yeah, I do some general urology. We almost all do. I tend to specialize in male voiding dysfunction, BPH, and then also a lot of prostate cancer survivorship issues like incontinence after prostate cancer surgery, erectile dysfunction, things along those lines.

Host: Yeah, I know I've sent patients to you with complex issues regarding sort of urinary diversion and so forth. I know you have a bit of a specialty in that with the trauma at Penn, we have a lot of patients that have a lot of urinary issues after major trauma and so forth. So let's talk about lower urinary tract symptoms.

And I just want to ask a simple question, Bill. What is normal for a 40-year-old man or older to experience in terms of the urinary tract?

Bill Jaffe, MD: You're not asking for yourself?

Host: Uh, I, I talk to patients about a lot, and I, I'm a little too self-referential.

Bill Jaffe, MD: So there's a wide range of normal, obviously. And you know, there are a lot of non urological factors that affect people's urinating. What really brings people to us, and probably to you first, is what's bothering them. So if you look at the statistics, you know, frequency, daytime frequency is defined as more than eight times in a day. Nocturia is usually defined as more than once at night. So the average man over the age of 50, say and the average woman for that matter, wakes up once at night to urinate. And there's a lot of things that change as we get older. You know, we have a lot of long-term longitudinal community dwelling studies that I'm sure you're very familiar with, like Olmstead County, Massachusetts study, the Aging Male, where we look at what happens to community dwelling people that are not seeing a urologist, what happens to them over five, 10 years and longer with their urinating symptoms.

And we know that people's flow rates get slower. You know, their stream gets weaker as they get older. Men and women, people go more frequently. People wake up at night. Urgency starts to become a very common symptom. You know, about 30% of men and women in their seventies or older will report urgency if you ask them.

But like a lot of other conditions, people can have fairly moderate or severe symptoms and not seek care for it. And people can have relatively mild symptoms and seek a lot of care for it. A lot of what ends up happening is how much it impacts people's quality of life. Then also in some cases, how much people are worried about other more serious conditions. Like do I have prostate cancer, do I have bladder cancer? And that's generally what drives people to come see us.

Host: So, you know, we often in men at least, attribute these symptoms to BPH, though you noted they are common in women as well, so it's not all BPH, clearly. There's something else going on that's causing these symptoms. So, what is benign prostatic hypertrophy and how much is it actually causing these symptoms?

Bill Jaffe, MD: Yeah, it's a big question Kendal. And there's a lot of answers to that. Technically, BHP is benign prostatic hyperplasia or hypertrophy. Of course, you all know what hyperplasia and hypertrophy mean. But those are really technically only diagnoses that can be made on a pathology specimen.

Like you need prostate tissue to say there's hyperplasia. So, probably about 10 or 15 years ago, sort of a new nomenclature was developed that's a little bit more accurate that I like to use when I can. It's just a lot of people aren't familiar with it, so it's probably more accurate to refer to it as benign prostatic enlargement, meaning the prostate gland is physically enlarged.

And that in and of itself is usually not something that requires a lot of attention or treatment. But men can have urinating symptoms that are related to that. That's called LUTS or lower urinary tract symptoms. And as we talked about at the beginning, those may or may not be related to the prostate.

Probably 15, 20 years ago and even some people still, any man over the age of 40 or 50 that comes in gets treated as if it's a prostate problem. They get put on Flomax. If that doesn't work, they get a TURP or a green light laser prostatectomy or something. But my clinic is full of people that have had those treatments and failed them because their symptoms have nothing to do with their prostate.

And it's actually really fascinating. If you look at the, the literature about prostate size and men's urinating symptoms, there's only a weak correlation between prostate size and symptoms and degree of bother from those symptoms. And if you take it a step further and look at urodynamic obstruction, so are men's bladders having to work too hard to empty?

There's only a relatively weak correlation between prostate size and urodynamic obstruction. So I mean, you guys are all familiar with alpha blockers like Flomax, tamsulosin, and the other ones, older drugs like Hytrin, terazosin, and Cardura doxazosin. Those drugs don't change prostate size or shape. They relax the smooth muscles in the prostate. And men can have increased smooth muscle tone with small, medium or big prostates. There's a pretty interesting condition called primary bladder neck obstruction. So I see young men in their twenties and thirties who have large volume retention and hydronephrosis.

And you do urodynamic studies on those men. And they have the most severe bladder outlet obstruction, that we see. And they have small prostates. They have 20 gram prostate glands. They just have smooth muscle obstruction, usually at the bladder neck. You know, it's always important to keep in mind that size doesn't always matter.

Size of the prostate doesn't always matter. And that men's urinating symptoms are often related to bladder dysfunction, just like women have. I have that conversation with men every day, say, does your wife have frequency and

urgency? Well, guess what? She does not have a prostate. And then of course there are a lot of lifestyle and behavioral factors that can influence urinating symptoms.

And there's other medical problems and medications that can influence urinating symptoms like, poorly controlled diabetes, for a simple example. I mean, it's how a lot of people get diagnosed with diabetes is they're urinating all the time.

Host: I've had some women recently that are on SGLT 2 inhibitors, these new drugs for diabetes and they're having, and of course, excretes glucose in the urine and, they're coming in complaining of, frequency of urination as being a primary side effect. So, the way I do this, if somebody comes into me to complaining of these symptoms, if they haven't had a PSA, I do a PSA, I'll do a UA, those are usually fine. And I'll put them on Flomax. That's my basic approach. I do that before I ever call you. I assume that's the right thing to do, right?

Bill Jaffe, MD: Some of the time. So if it, the, the nice thing is the guidelines about the initial evaluation of BPH and the AUA guidelines are actually almost identical to the guidelines for initial evaluation of overactive bladder. The guidelines basically say everybody should get a history and physical of course, if you can, that's the one time where I do examine someone's prostate, just to make sure there's nothing serious going on and I, and to get a rough sense of their prostate size, cause it may matter in the future, not only for what type of drugs we might use, but also what type of surgery that might be available to them.

So history, physical exam, a validated symptom score assessment, which we use the IPSS or the AUA symptom score, which is really just for following people. I would say it's probably not that important in terms of your medical care the first time you meet somebody and then a UA, and that is really all the guidelines say you need to do on the initial evaluation.

And PSA, discussion about prostate cancer screening in age appropriate men. We do not get creatinines any longer. You are not supposed to. We do not get retroperitoneal ultrasounds as a screening test. You're not supposed to. I would say the only thing that I generally do in the office, the first time I meet a guy is getting a bladder scan post void residual. Uh, it's considered optional in the guidelines, but that's one thing that's cheap, non-invasive, and a way for me to know that there's nothing terrible going on, that someone's walking around retaining, you know, hundreds of milliliters of urine. The only difference to what you do, and I would say starting people on an alpha blocker is appropriate

for some men, but in, in men who have predominantly what we call storage symptoms or overactive bladder symptoms, especially urgency, you may want to consider giving those men treatment for overactive bladder first, which is either overactive bladder medications or pelvic floor physical therapy.

Because, like we talked about before, a lot of these men just have overactive bladder. The way I look at that, I tell these guys, there's no way to know. We may try you on one drug and then switch you to another. We may try you on one drug and add a second drug. It, a lot of it is just empiric therapy, but if their prostate is not particularly big, and they mostly have storage, overactive bladder symptoms, and they empty reasonably well, then those guys, I'm going to probably start them on overactive bladder treatments before prostate treatments.

Host: If you have, let's say I do a PVR and I used to walk around with a butterfly ultrasound, that has this wonderful feature on it that you can plug it into your phone and it can calculate a bladder volume right there on the spot. And I'm having some trouble getting my butterfly to work. I need to call the company, but nevertheless, I would do it a lot. So if a patient does not have significant retention, does that mean they don't have BPH?

Bill Jaffe, MD: No. So you can have a, a severe obstruction from the prostate, and during the sort of initial phase of the disease, your bladder will compensate. So the bladder gets stronger, the muscle gets stronger, the bladder wall gets thicker, and for a period of time people can still empty well. It's really when the bladder starts to decompensate that it has more trouble emptying.

The bladder is very similar to the heart. Bladder muscle and heart muscle are very similar, so we actually see almost identical diseases in the bladder that cardiologists see in the heart. Retaining urine is a form of congestive heart failure. Left heart failure.

Host: So, if people do have retention, and usually at the benchmarks for me, and I'm, I'm testing myself here against your vast knowledge on this. You know, I think the bladder should be in less than 30 ccs and normal in people as a post void residual. I used to have this thing in my head, you know, when I was first learning about this, that I, if somebody was a hundred ccs or more, I would put them on Flomax.

If they were 200 ccs or more, I'd call urology. If they were 300 ccs or more, I'd start to be thinking about a, a Foley catheter that they may need that. Is that, are those benchmarks accurate?

Bill Jaffe, MD: They're good starts, I would say. I would say, anything less than a hundred, I don't even really think twice about. In the, the clinical trials, if you look at overactive bladder drug clinical trials in men with BPH, most of those trials included men with post blood residuals of less than 150 milliliters.

And what's important in those trials, which is contrary to everything I was taught, you know, as a resident 20, 25 years ago, is that overactive bladder drugs, even anticholinergic drugs, do not put men into retention. Men with baseline postvoid residuals of less than about 150 milliliters do not have any higher risk of retention when you put them on anticholinergic drugs.

And then of course, now we have a couple of beta-3-agonist drugs, mirabegron and vibegron that don't really affect emptying at all. When it is dangerous is a much more difficult question. You know, most people that retain urine, it's chronic retention from chronic over distension of the bladder. So when you were asking me about, what post void residuals are dangerous and when somebody should get a foley catheter and when do men start retaining urine?

Well, when the bladder first starts to decompensate, people's bladder start getting stretched out, and they don't really urinate until higher volume. So I have one guy that really sort of brings this home. He's about 85 years old. He's had residuals of over two liters for ever since I've been back at Penn, basically for at least 15 years, he's completely asymptomatic.

His renal function is normal. He has no hydronephrosis, he has not had any urinary tract infections. He has an overstretched bladder. So his bladder fills up to like three liters and then he pees 400 down to 2.6 liters, and then it fills back up again to three liters and he pees down to 2.6. That's not uncommon. That's chronic retention. He's comfortable, he is sitting there in the office. Acute retention is when people are in pain. So if I took you, presumably you don't retain urine and I put 500 milliliters in your bladder, you would feel like you really have to go. And if I put 750 milliliters in your bladder, you'd be uncomfortable in pain going to the ER.

But guys like that, that have chronically over distended bladders are completely asymptomatic. This comes up all the time post-op, right? So if that guy goes to get a hip replacement, and they put a catheter in and no one's paying attention, because it's an orthopedic surgeon and they're probably not paying attention.

So, um, you know, three liters comes out of his bladder, no one notices, and then he goes to the floor and recovers. And two days later they take his catheter

out for a void trial before he goes home and he can't urinate and they do a bladder scan and he's got 500 milliliters in his bladder after six hours.

And they say, well, you know, you can't urinate, wait a couple hours more and he's got 750, he can't urinate. They put in a catheter and he goes home. And if he sees somebody that doesn't understand this, he is going to end up living with that catheter because his bladder is not going to get filled up enough for it to get sort of the trigger to squeeze.

So sometimes in those patients, I, I take their catheter, I tell them to go home. It might take 24 hours for your bladder to fill up, but you're going to start urinating the way you were before your hip replacement or your knee replacement, or your CABG. You know, there's nothing that happens during those hospitalizations and those surgeries that permanently changes their bladder function, they can almost always get back to the way they were.

Which may not be an ideal situation, but it's not a permanent retention situation where they need to live with a catheter necessarily.

Host: So most of the acute urinary retention, so that are clearly triggered by surgery or some other hospitalization or something, you're able to get people off of their Foleys.

Bill Jaffe, MD: Yes. So there's a lot of data about that. Acute retention is a common thing. It happens if you take guys who are, who have BPH or whatever we call BPH, who have some symptoms and would enroll in a clinical trial, the guys in the placebo arm of those trials, when they're followed for about five years, have about an 8% risk of spontaneous acute retention.

So it happens. Sometimes for no good reason. There's a lot of things that we know that can precipitate it, like as you mentioned, anesthesia, narcotic pain medication, decongestants, constipation, immobility, excessive alcohol intake. And then sometimes it just happens. I mean, we know actually guys get prostate infarcts, which is a really interesting thing.

We know on autopsy specimens and prostate specimens from prostate cancer surgery that people have had infarcts in the prostate, especially as it gets bigger and sort of outgrows his blood supply. And what happens, we think when a man has a prostate infarct is they have temporary inflammatory process.

They get maybe some discomfort, dysuria. They can have low grade fevers, they can have a little pain, and the prostate swells and they have temporary

difficulty urinating. Their PSA may go up. These guys often get treated for UTIs, but the culture then comes back negative, and then five to seven days later their symptoms go back to baseline.

Host: So I want to go back to this BPH overactive bladder, cause you said that starting on Flomax is reasonable, but you're using a lot of these drugs for overactive bladder and I want to kind of go through those cause quite frankly I don't use those very much. I have some patients that are on them.

You mentioned Myrbetriq. I mean, there's a list of others. Going back to Detrol and oxybutynin and Ditropan and so forth. Can you help us go through those medications? Which ones are now being used? What's, how do you use them and so forth.

Bill Jaffe, MD: Yeah, there's a lot of choices. We have a lot of what I call me too drugs in urology. You know, we have a lot of drugs that aren't any better than the other ones. They're just different. So, I mean, we have two classes. We have the anticholinergic, antimuscarinic drugs, so the old fashioned ones, oxybutynin, oxybutynin, long acting Detrol. And then newer drugs like VESIcare and Enablex, Toviaz, Santura. Those drugs are all effective. They have a lot of side effects, as you guys know, dry mouth, constipation, blurry vision. And then sort of the big elephant in the room is the cognitive dysfunction with anticholinergic therapy and especially the cumulative burden of anticholinergic therapy that you probably see in a lot of your patients.

So, you know, we are somewhat reluctant to prescribe those drugs to older patients. The one that's actually been tested for this, that we will use if we, if we have to, is Sanctura or trospium especially the long acting form. It's a cortonary amine and is not supposed to cross the blood brain barrier.

They've actually done some trials with cognitive function and it doesn't seem to have a lot of effects. So if you can in older patients, if you can use Sanctura, it's a good drug coverage, for it is not great, even though it's been around for a while. And then the other drugs are honestly essentially interchangeable.

There's a lot of patient-to-patient variability. Some patients will respond better to one drug versus another. It's a lot of trial and error. The only particular highlights I can think of is that Enablex or darifenacin is more constipating than the other ones. Sometimes that's good in patients that have urge continence and fecal incontinence, that might be a good choice for some people.

But in terms of the other ones that are essentially interchangeable, except oxybutynin probably has the most side effects and the probably the greatest risk of cognitive dysfunction. And then the newer drugs, the beta-3-agonists are really good because they have almost no side effects. We're talking about Myrbetriq and vibegron, gemtesa. They do not have the dry mouth side effects. Some people like complain a little bit of constipation, but not nearly as much as the anticholinergic drugs, and they're not supposed to have any cognitive side effects. So especially in elderly patients, we try to get them those drugs first.

And then the nice thing is you can also use them in combination therapy with anticholinergic drugs because they have different mechanisms. So sometimes people have people on two different overactive bladder drugs.

Host: Are you able to get insurance coverage for the newer agents, the Mybetriq and so forth?

Bill Jaffe, MD: Yeah. Usually most insurance plans will cover one or the other. So sometimes they have to, switch, but they're essentially interchangeable as far as I'm concerned.

Host: So you're trying those first, assuming, you know, somebody has a normal UA, a normal PSA. Now if you really want to know what's going on though, right? This is my understanding from I think, previous patients with you, we need to do urodynamic studies, right? If we really want to know the contribution of the prostate and or the outflow tract and the bladder muscle itself, that's the way to do it, right?

Bill Jaffe, MD: Correct it's really the only way to get definitive answers about how much or how little the urinary tract is contributing to their symptoms. And is it a bladder problem? Is it a prostate problem or is it a combination of both? We generally do that testing when people are failing conservative treatments.

So if you, if you look at the guidelines, they basically say we should offer and give people conservative, reversible treatments, see if we can get them to a happy place. So that, I mean, that's the whole goal here is to try to reduce bother from these symptoms. And I'm almost always leaving it up to patients how much farther they want to take it.

You know, if they get a trial of medication, they come back and they say, well, things are better, but maybe not perfect. The discussion we have is, well, well, can you live like this or do you want to do something different? The vast

majority of the time, there's no good medical reason why I would push somebody to do anything more aggressive or more invasive.

The vast, vast majority of people can live forever with their urinating problems without any health effects. The main caveat to that is if they retain a lot of urine, because then it can lead to UTIs, it can back up to their kidneys, they can form bladder stones. That's why I kind of like to check emptying the first time I meet them.

And, and even though even if people don't have, handheld ultrasound machines, you can order a simple ultrasound PVR from radiology and it takes five minutes. So that's a nice little thing you guys can do. If you're starting someone on an overactive bladder medication or on Flomax before they come back and see you next time, you can have them get an ultrasound PVR to get a a, an assessment of their emptying.

But really, as long as they empty well and their other tests are normal, like their UA is normal, those people are not going to have any downstream health effects from whatever's bothering them. So, I see people that have very severe symptoms that don't want to do anything, and I see people that have mild symptoms that are banging down my door to have surgery.

Host: So I want to get back into the urodynamic study. So I actually want, I want to question this comes up occasionally. How fast does Flomax work? Like do you see a demonstrable decrease in their PVR within a certain timeframe if you put them on Flomax?

Bill Jaffe, MD: So it works pretty quickly. It works probably within two or three days at most. I don't think you will see a, a dramatic improvement in anything. You see modest improvements. I mean, there's some exceptions to that, but most people it helps more with, with symptoms than it does with the sort of objective parameters.

It does help the objective parameters, but not as much as, as what people get in symptom relief, and we don't really know why that is. I mean, there are alpha-1 receptors in the bladder. There are alpha-1D receptors in the spinal cord, so some of the effects of the alpha blockers may not only be on the prostate, there may be effects on the bladder and the spinal cord as well.

But people should have pretty quick relief. The guidelines for acute retention basically say that we should put somebody on alpha blocker for like two or

three days before removing their catheter, so they should work in, in that amount of time.

Host: So going back to the patient who's not relieved with alpha blocker or the anticholinergics and so forth, and you're starting to consider a potential transurethral prostatectomy, right? So you're trying to decide whether they might benefit from additional procedure. Those are the folks that you do urodynamic studies in?

Bill Jaffe, MD: For the most part, or overactive bladder treatments. You know, we have procedural therapy for people with overactive bladder that fail medical therapy or pelvic floor physical therapy. That's when me and most other people will use urodynamic testing before procedural therapy. And what we're basically looking for is in a man is there obstruction?

So, we determine obstruction by correlating their bladder pressures while they're urinating with their flow rates. So high pressure, low flow is obstruction. So if they have obstruction, then at least some of their symptoms could be relieved with surgical therapy. And that's where it gets really confusing.

The most difficult patients to counsel are the men that have mixed symptoms. So men that have frequency, urgency, noctura and a weak stream, and maybe they don't empty great and you do urodynamics and they're obstructed. And they also have what we call detrusor overactivity. Detrusor being the bladder being overactive.

So detrusor overactivity is what gives most people overactive bladder symptoms. It's the bladder squeezing without your permission. And so it can do that when it's not full and at random times, and that's what causes urgency. And if your bladder is squeezing when it's half full, then you're going to urinate, you're going to have frequency.

So that's where it gets complicated because as, as we've been discussing all along, a lot of women have overactive bladder. Women don't have a prostate, so in some people it's just a part of aging. And it's more common in some medical conditions like diabetes and certain neurological conditions. But we also know mostly from animal models that if the bladder is obstructed, It is more likely to become overactive.

So if you take groups of men that have both and you do prostate surgery on them, what we call their obstructive symptoms, their flow, their stream, their ability to empty will almost always get better. And then about two thirds of

them, their frequency, urgency symptoms will get better, but in one third of those men it will not.

What do you think is actually bringing people to the urologist most of the time? It's the frequency and urgency symptoms. Cause that's what impacts people's quality of life. There are not a lot of men who come in and just say, Hey, my stream stinks. You know, it's slow, but I only go four times a day and I sleep through the night.

Like, people generally don't come to the doctor for that. They come when they have frequency, urgency, incontinence and waking up at night and up to a third of those men will not have improvement with BPH surgery. So that's really a counseling thing because if, if they have both, you really do need to treat the obstruction first and tell them you might require ongoing treatment for your frequency, urgency symptoms.

It might not get better.

Host: Let's take the next step further. How do you treat detrussor instability and so forth?

Bill Jaffe, MD: So then we treat them just purely as overactive bladder patients. Once you've relieved the obstruction, if their overactive bladder symptoms don't get better and it can take three to six months for it to get better because their bladder has to remodel basically. But if it does not get better, then we just offer them the same treatments that we would've started with if they just had overactive bladder.

We offer them pelvic floor physical therapy, overactive bladder medications, and then procedural therapy like Botox, neuromodulation with InterStim. There's an office neuromodulation called PTNS or percutaneous tibial nerve stimulation, which is kind of interesting, and in an office setting. We have a lot of treatments for those things as well.

Host: So Bill, I've had a couple people with UroLift, and this seems to be a new thing that's out there. Let's talk a a little bit about these various surgeries that are out there. We're all familiar with TURP or prostatectomy, but what else is out there that we should know about?

Bill Jaffe, MD: So there's a wide range of things and there's new procedures coming on the market constantly. TURP is sort of considered the gold standard, but I would say over the last 20 years there's really been a push for what we call

minimally invasive surgical therapies or MIST treatments. And honestly, none of them have really stood the test of time.

They all looked good in initial clinical trials, with carefully selected patients and things like that. Some of you may remember things like microwave thermotherapy that was done in the nineties and early two thousands that was going to replace TURP. It's not even around anymore. There was a procedure called TUNA, which was a radiofrequency ablation, not even around anymore.

But the current minimally invasive technologies that we have the most common ones are UroLift, which is, it's not a resective procedure. It doesn't remove any tissue. It basically places these tensioning sutures in the prostatic urethra. So it's a tensioning band that has a, an anchor on the inside end of the prostatic urethra, and then deploys an anchor outside the prostate capsule.

And it, it literally pulls the lateral lobes of the prostate away from the urethra. So it's really easy to do. There are really almost no side effects and complications, and it does work. It works for small to medium sized prostate glands, in men with mild to moderate symptoms. It's just not terribly durable. The re-treatment rates are fairly high and the improvements that people get are, are definitely the objective and subjective improvements that people get are not anywhere near what people normally get with a TURP. Rezum is a heat treatment, it's a steam treatment, that uses steam to destroy the parts of the prostate that's impinging on the urethra.

Very similar clinical results to UroLift. We actually don't offer Rezum at Penn, but it, it's a reasonable thing for some men. These procedures are, they're less to go through. They preserve ejaculation, which is important to some men, have no effect on sexual function and the incontinence rates are almost zero.

So that's why it's attractive to some people. It can be done in the office in some places. At Penn, we don't do really much of anything in the office for a lot of different reasons, but, you know, out in the real world, these are things that are done with just some local anesthesia in the office that take 10 or 15 minutes. And then there's a whole bunch of new technologies that are out there, various forms of prostatic stents. There's something called iTind, which is this sort of nitinol basket that goes in the prostatic urethra for like three to five days. There's something called Optilume, which is a stent with paclitaxel coating on the balloon to decrease proliferation. So there's a whole range of things.

And then there are some more aggressive procedures for really big prostates. So prostates that are bigger than about 80 to a hundred cubic centimeters. TURPs

are difficult, long, more morbidity. So there's some procedures for really big prostates. Ablation is what we're offering at Penn, which is really good for some guys. There's a procedure called Holmium laser enucleation of the prostate, which is also very good. And then some guys end up getting either, open or robotic, what we call simple prostatectomy, which are just removal of the central gland of the prostate. Not the whole prostate, like with prostate cancer surgery, but just the middle obstructing part.

Host: And these are for people with really significant life altering symptoms, right?

Bill Jaffe, MD: Not always. They're are for people with severe symptoms that don't respond to medical therapy and guys that want surgery, that's probably the biggest impact prostate size has on all of this is what surgical procedures are appropriate if someone wants to have surgery. So that's, I sort of talk to men and say, do you want to have surgery? And if you do, these are the options based on your prostate size and configuration. So what might be a TURP for one man might need robotic surgery for another man if his prostate's really big. Now, that might make him a little bit less likely to want to have surgery, but.

Host: So, the one medication class we didn't talk about, you know, are the alpha reductase inhibitors, which, solely shrink the prostate. They're not for urine flow per se, but they're used insofar as the prostatic enlargement is the cause of the urine flow problem, which we don't always know. So, I don't think I use those primarily a lot as a primary care physician cause I'm not exactly sure what I'm treating. I don't know that the prostate enlargement is the problem. Usually at that point they failed some other things and I'm thinking about sending them to you anyway. Maybe you can speak to those drugs.

Bill Jaffe, MD: Yeah, there's two 5-alpha-reductase inhibitors. Proscar has been around for a long time now, finasteride. And then Avodart, dutasteride has also been around for a long time. They're, they're fairly interchangeable from a, a clinical standpoint. Avodart has a much longer half-life, so people can actually take Avodart like a couple times a week and it's just as effective, although that's not how most people take it. So yeah, these are interesting medications. They only do something in men with prostates that are bigger than 40 or 50 cubic centimeters. They don't work at all on guys with smaller glands.

And what they really do is they lower the risk of retention by two thirds. They lower the risk of crossing over to BPH surgery by two thirds, which is, it's kind of a soft measure, but I mean, that's why most people get surgery because they go to the doctor and ask for surgery. And so use of these drugs lowers the

chance of them doing that by two thirds. They do help with symptoms a little bit, and they do help with things like flow rate and emptying a little bit, not as much as the alpha blockers.

So where we use these drugs sometimes is combination therapy. So people start an alpha blocker if their prostate's really big and they want to avoid surgery, or if they've had urinary retention and they're worried about that happening again, they can start a 5-alpha-reductase inhibitor in combination.

There's, there's not really, I do see guys who are only on a 5-alpha-reductase inhibitor and there's not really a great rationale for those guys unless they didn't tolerate alpha blockers at all. And then you might consider putting them on just a 5-ARI. And of course, you guys all know that, that those cut the PSA in half.

Host: I had actually come upon that recently in a urologist note. I don't think it was you. And, uh, it reminded me of that fact, which I, I hadn't recalled actually. It seems to me like the drug class I'm probably under utilizing, are the drugs for overactive bladder that you talked about, the anticholinergics and Myrbetriq and so forth.

I want to circle back to pelvic floor therapy because, this comes up for some irritable bowel syndrome and other things, constipation, and, how effective is that? How are you referring people and so forth?

Bill Jaffe, MD: So it can be very effective. I mean, compliance is not great. I always talk to patients. I say, listen, I'm me personally, I'm terrible with physical therapy. I've been to a physical therapist for knee, back, ankles. And I go and I do it for a couple of weeks and then, you know, it falls off and I stop doing it.

I ask patients to be honest with themselves, if they're not going to do it, it's not a good treatment. But for motivated patients who are compliant, it's about as effective as medical therapy for frequency, urgency symptoms. But you have to do it and you have to keep doing it. So it does a couple things, especially in, in women.

You know, women are much more likely to have incontinence with urgency than men because they have much lower outlet resistance, right? So men are less likely to leak unless you do a TURP on them and they're more likely to leak with urgency. That can be a problem sometimes. But, pelvic floor physical therapy will, number one, strengthen their pelvic floor.

So when they have urgency and they do a Kegal and they hold it, they're more likely to be able to hold it and not have accidents. But there's also something that goes on with the afferent pathways that it sort of retrains the bladder to overall have less urgency and it, it actually works. And we know that when people are having involuntary bladder contractions, bladder spasms, if people do Kegels in a certain way while that's happening, it can actually make the bladder contractions stop.

Host: That's terrific. So there's a couple things I wanted to ask you about that come up. One is a drug we haven't talked about, but will, when we talk about erectile dysfunction in a moment. And that's Cialis or tadalafil, which for ED is given as a 20 milligram dose, but has also been approved as a five milligram daily dose for urine flow. What is your experience with that and using that approach?

Bill Jaffe, MD: Well, so guys also take it daily for ED only, you know, if they want more spontaneity. But it does have the dual indication from the FDA for treating both BPH related symptoms and ED. That's mostly when I use it, when guys have both problems. I do see a lot of situations where, you know, I think men, they'll say, well, what about, you know, we're talking about Flomax or Uroxatral or whatever, and they say, oh, I think I'd rather take the Cialis daily.

And they want the benefit for the ED, and that's great. That's fine. If you look at the, the sort of clinical data on it, the improvements that men get, are definitely less than what they get with alpha blockers. No one really knows how the PD-5 inhibitors work on the urinary system. I mean, there are nitric oxide receptors in the urethra and in the prostate and in the bladder. But they do help. They've been proven to help in randomized double blinded placebo controlled studies. I think just a little bit less than what alpha blockers get you.

Host: I've had the same experience of patients asking for it for, because they have ED and urine flow issues and want to take it on a daily basis. And I, I wasn't certain by the way that five milligrams a day was making, would make a big difference on ED, but it sounds like it does.

Bill Jaffe, MD: Yeah. And we have guys now, even though it's sort of off label, we have guys that'll take five milligrams of Cialis daily, but it's not quite good enough for their ED. And so they'll take 50 milligrams of sildenafil, Viagra as like a boost to that. And that's perfectly fine as long as they, they tolerate it and they don't have side effects.

Host: So let's talk about erectile dysfunction, cause this comes up a lot and we've started the discussion. I have a few patients who are status post prostatectomy for prostate cancer and have, you know, terrible problems with ED and one gentleman is actually quite bitter about it.

Bill Jaffe, MD: Yeah, a lot of them are.

Host: Yeah, so, let's just talk about the patient who comes in. I mean, I think we all know how to use these drugs. I myself don't see or think of there's a big difference between Cialis and Viagra. I basically choose one or the others. There's Levitra too. I don't usually use that one as often. I don't know why.

Bill Jaffe, MD: You can't get generic options for Levitra. So they're generic options. I mean, people can get, it's a lot different than it was 10 years ago where it was really sad actually. I would have guys come in and, you know, they say, oh, my buddy gave me Viagra, it worked great. And I'd give them a script and they couldn't get it.

It was $50 a pill. And you sort of tell them, well, you know, I can't do anything. You know, we don't keep samples. And even if I did keep samples, I'm not going to give them samples forever. But now you can get Viagra and Cialis for next to nothing, using either GoodRx or, I don't know if any of you guys use Mark Cuban's, Pharmacy Cost Plus Drugs.

But you can get a three-month supply of daily Cialis for $2 and 50 cents a month. From Cost Plus Drugs, it's seven, $7 and 50 cents for a three-month supply of daily Cialis. So we use that a lot too. But GoodRx has usually Viagra you can get for 20 cents a pill or something.

Cost has been totally taken off the table for those drugs. There's a bunch of different categories of guys that we see with ED. and there's really very little workup that the average urologist does. The majority of the guys are going to be your middle aged, older gentlemen that have obvious risk factors, diabetes, high blood pressure, high cholesterol, smoking, obesity, and you're not going to cure their erectile dysfunction. We just treat it. And we almost always start by treating it with the pills. And that is certainly something that, that you guys can do is prescribe these pills. You know, most prescriptions for these medications around the country are not written by a urologist, they're written by primary care people. And obviously we have, we do have other treatments available when, when pills don't work. Checking testosterone levels is important for some men. You know, especially if they have other symptoms of low testosterone. Number one, if their testosterone is low, you can help with those symptoms.

Whether or not it helps with their actual erections is definitely less predictable, and less dramatic. I mean, testosterone therapy is often not a good treatment by itself for erections. But we're sort of in a golden age of testosterone replacement therapy right now. You know, there was just a big paper published about major adverse cardiac events, cause that was one of the, the big red flags that we were taught for the last 15 years is that testosterone replacement therapy might increase the risk of cardiovascular events.

It doesn't. So it's safe and there, there's probably some benefits to making men eugonadal who are hypogonadal certainly in terms of bone density and sense of wellbeing and depression scores and all those kind of things. So there's probably going to be, you know, more reasons to screen men for low testosterone in the future.

We definitely think about it you know, with every patient with ED. I won't say I check it on every patient with ED, but it's definitely a discussion about whether they have other symptoms of hypogonadism. So those guys, we just prescribe drugs. Young guys that don't have risk factors, you know, they often, but not always often have a psychogenic component, which is very difficult to deal with. I mean, the drugs still work in those men usually. And we often talk to them about counseling. Not a lot of them do it for many reasons. Cost, you know, that kind of stuff is not generally covered by insurance. It's very time intensive, expensive for men to start seeing a therapist once or twice a week to talk about their hangups with sexual activity.

But we prescribe drugs for those guys as well, without much of a workup. It's pretty rare that you're going to diagnose something in a workup for ED that's going to be correctable. We all look for reversible things, right? So, the things that we talked about with men's overall health, and screening them for diabetes and smoking cessation, all that kind of stuff. Exercise. And then obviously there's some drugs that can contribute to ED, the anti-hypertensives particularly hydrochlorothiazide. If someone's on that or a beta blocker, we might tell them to talk to you about switching to something else. Some of the, you know, psychiatric medications, the antidepressants and anti-anxiety drugs can contribute. Outside of those things in general, we just treat.

Host: I actually, I wasn't planning to talk to you about low testosterone, but I want to circle back on that. But let's finish off on ED. So how effective are the options, beyond that, the things that you might do for ED beyond the medicines?

Bill Jaffe, MD: Well, implants are a hundred percent effective, but the, I would, the satisfaction rates are about 85 to 90%. Right now there's four treatments that are available for guys who don't respond to pills. Outside of the things that you hear advertised on the radio, like the Wave therapy, which is, I would say right now, not a great treatment.

I think it's investigational, it's considered investigational by the AUA and the Sexual Medicine Society of North America. Especially the device that a lot of people are using, which are low energy, basically sound waves. I mean, that's placebo effect. There may be some effect with what's called true low intensity shockwave therapy, but not a lot of places actually offer that.

Outside of that, the things that are standard treatments are vacuum erection devices. They work. I will say most people do not like using them for sex, but they do work. And it should definitely be offered to people. You know, these are penis pumps. These are plastic cylinders that create a vacuum, and pulls the penis out and, pulls venous blood into the penis.

It's a one-time expense. They cost about $250 for medical grade ones, but people can also buy them online for cheaper. I don't have a lot of people that use them regularly for sexual activity, but some, a few do. There are intraurethral suppositories. You may have heard of Muse, M-U-S-E. It's ridiculously expensive. It's about $90 a dose. There are some compounded gels that men can squirt into their urethra. These are like prostaglandin medications, vasodilators, they are the urethral suppositories and gels are okay. They're a little bit stronger than the pills, but not a lot. And then there's injection therapy, which we do a ton of.

This was stuff that was around before Viagra even. So this is injecting either prostaglandin or a mixture of the most common thing is called TriMix. It's prostaglandin, phentolamine and papaverine, you know, all vasodilating medications, and we use compounding pharmacies for that. It's, it's relatively inexpensive and it's about 80% effective in men who fail pills.

So that is definitely the most common thing that people start on if the pills aren't working. And then we have implant surgery.

Host: Men inject themselves right?

Bill Jaffe, MD: Or their partners do. I mean, I often encourage people to, to bring their partners in. It can be, sort of, uh, a little bit of a different form of foreplay for some people. Or some guys who are just like really needle phobic.

They say, I'm not going to be able to do that, but maybe my girlfriend or my wife can. So anybody can do it, but yeah, they do it themselves or a partner does it while they're at home. We have the medication and the needles delivered to them from the compounding pharmacy, and, it works very quickly.

It's a little bit more spontaneous than the pills. Usually works within about five or 10 minutes of doing the injection.

Host: I want to circle back to low testosterone, ‘cause this has come up a bit. I recently heard on another podcast actually that if you get a low testosterone level, you should repeat it, in a morning sample in which the patient is fasting, to try to get an accurate judge of that. I don't know. I, I, I think it was a talk at the ACP.

Bill Jaffe, MD: Yeah, definitely morning sample. I don't, I haven't heard a lot about the fasting part, but there's a, you know, a diurnal variation in testosterone levels. So typically we tell people before nine or 10:00 AM and then if you are going to do a repeat testosterone, like it's perfectly, uh, adequate to get a, just a total testosterone as a screening test.

But if you're going to repeat it, it's often a good idea to get free in total with sex hormone binding globulin, just to check on what their bioavailable testosterone is, because that's actually, the more important part in terms of their symptoms.

Host: So how would I interpret that when I get it back?

Bill Jaffe, MD: So if they have a normal total testosterone, but a low free, because their SHBG is high, then they're still hypogonadal. You maybe have to look for some reasons why their SHBG might be high. It's often due to liver diseases and things like that, but then that guy, you could consider replacing his testosterone level, even if his total is normal.

Host: Let's talk about testosterone replacement. I know there's injections and there's gels and so forth. I think some of them are quite expensive. Can you take us through that?

Bill Jaffe, MD: Yeah. I mean, I'm not much of an expert in testosterone treatments, but we use them. The gels are the most common thing. They're easy to use. They're generally one form or another is generally covered. There's a lot of different competing brands. So gels are, are, they're easy to use. They give people a pretty steady level of testosterone levels in their bloodstream. They're safe. Injections. Some guys like that, some guys actually like the peaks and

troughs that they get with injections. Um, and people can do that at home. You know, we can order testosterone injections for them.

There's a new branded form called XYOSTED, which is supposed to be pretty easy to use. I haven't had anybody on it yet. I think coverage is going to be difficult for now for that. But you can get testosterone injections, like garden variety testosterone injections pretty cheaply. And then there's pellets, there's TESTOPEL, which some of my partners do, which are implantable pellets that generally need to be put in about once a month, that gives men a little bit of a longer acting treatment that they don't have to, you know, worry about doing shots once a week or applying a gel. But all of them are effective in, in, restoring men's testosterone levels.

Host: And you can find one of those gels that is affordable huh?

Bill Jaffe, MD: Yeah, usually one of them is going to be covered. I mean, it is, there are a lot of hoops to jump through sometimes and it can be quite annoying. I mean, I've had guys, this happens all the time. They're on testosterone therapy for years and you reorder it and then they need a prior auth, cause and then they want to see their testosterone level and they're, they see it's normal and they say, well it's not approved because he has normal testosterone.

Well he has normal testosterone because he's been on AndroGel. So I don't know how to document that any better. But it happens all the time. And thank God for our support staff and my nurses who are the ones that really end up dealing with all this stuff.

Host: Yeah, I think we could all say that. So this has been great actually. It's been really informative and, and helpful. Let me ask you this. Are there any things so that you wish we knew so that we don't send you patients for them?

Bill Jaffe, MD: All right. One more thing. All right, one, one more thing. This is like we, we just talked about this at our faculty meeting, and it is the bane of urology. See if you can guess what it is.

Host: Uh, what would it be? I mean, it's probably a minimally elevated PSA or.

Bill Jaffe, MD: No. Ball pain, scrotal

Host: Oh, is that right? Prostodynia.

Bill Jaffe, MD: Well, whatever you to call I mean, so we see a ton of people that have scrotal pain, penile pain. And honestly, the 98% of them have no urological problem and most of them have pelvic floor dysfunction or something neuropathic, musculoskeletal. It's really easy to work those people up.

I mean, you do an exam, you get a scrotal ultrasound, maybe urine test to make sure they don't have a UTI or something. And if all those things are normal, like, I mean, I'm happy to see them, but I'm not going to be able to tell them anything. I'm sure you see this all across the body.

People that have pain symptoms that are not necessarily related to the organ of interest. It's very difficult to know what to tell those people sometimes. And definitely they don't get a lot of benefit from seeing a urologist other than we end up sending them to pelvic floor physical therapy.

But we've had a lot of discussions with this in urology because there are actually some people who said, we should take this off our decision tree. We should not even see these patients. And a bunch of us said, well, that's not really fair. Like, you can't tell a primary care doctor who's seeing someone with, what they think is testicular pain and say, we're not going to see them.

I mean, we're urologists, so we end up having to see these people anyway, I think. But most of them, the vast majority of them don't have any GU pathology. Pelvic floor dysfunction is a very prevalent thing in men and women. And what you should think about, when you should think about pelvic floor dysfunction is when you have younger guys who have urinary symptoms, sexual symptoms and pain symptoms.

The guys that come in and say, I have penile pain, I have scrotal pain, I have pain with ejaculation. My erections aren't as good as they used to be. Those guys often have pelvic floor dysfunction. They have trouble relaxing their pelvic floor. The nerves get trapped. The nerves get irritated.

So it really, it explains all these symptoms, right? Their pelvic floor is tight, so their, their stream is weak and they have a hard time going or emptying. They have post void dribbling, their pelvic floor is tight. It irritates the nerve. So they get you know, the nerves that come through the pelvic floor into the perineum.

They have pain in the scrotum. Pain in the penis, and all the decreased blood flow through the pudenal arteries, inhibits their erections. It makes sense. There's no way to diagnose it other than these sort of clinical symptoms and

diagnosis of exclusion. And the only real way to treat it is by getting a good pelvic floor physical therapist and getting them to learn how to relax their pelvic floor. But it's challenging.

Host: I do see this and I see it young men mostly, some irritative symptoms, perineal pain, kind of, in that, generally some of them are cyclist by the way, which I, I tell them is probably, uh, an occupational hazard if you will. So let me just go back through this, make sure we have this right.

So, cause we do see this, scrotal ultrasound, rectal exam to examine the prostate. I assume in that case you're just making sure they don't have acute prostatitis,

Bill Jaffe, MD: A genital exam too.

Host: A genital exam. Yeah, you want to make sure they don't have a testicular mass, which is not usually painful. A lot of patients come in worried that they have testicular cancer and you explain to them, listen, testicular cancer isn't painful. So, so you do a scrotal ultrasound, a good exam, maybe a UA. If they have something in the UA, you might treat them with antibiotics. I know that's old school, but we used to do this. And then refer them for pelvic floor physical therapy. Are there any specific drugs? I know they're in the, not in the urologic category, that can actually improve things like something like, neurontin or, you know, something like that.

Bill Jaffe, MD: Yeah. Not specifically for those symptoms. I mean, people have tried every drug under the sun. You know, these are patients that used to be, still are often diagnosed with, you know, nonspecific prostatitis or prostadynia. If it's a woman, they get diagnosed with IC, right? Like people with quote unquote prostatitis, people with interstitial cystitis, the vast majority of them do not have anything wrong with their prostate or anything wrong with their bladder. They have a, they have a pelvic pain syndrome. So that's what we typically call these patients now is the chronic pelvic pain.

It's a big catchall diagnosis that refers to a lot of different things, but it's not really fair to call it interstitial cystitis because most of those people don't have anything wrong with their bladders. And with the, with the quote unquote prostatitis people, they don't have anything wrong with their prostate and their pain is not from their prostate.

I mean, I can't tell you how many guys I see that have penile pain or scrotal pain or supra pubic pain. And, and they say, well, I saw X, Y, and Z and I've been

diagnosed with prostatitis. Well you don't have prostatitis, sir. You have something else. But, you see these patients, you know, with other things like, you know, fibromyalgia, chronic fatigue syndrome, things that we can't pinpoint.

It's very, very frustrating for patients. And I always have to stop myself and keep that in mind because, you know, these patients, they take up a lot of time, right? They have a lot of questions. They've often seen multiple other people, they've had a lot of tests and no one can tell them what's wrong.

I usually tell them, well, I can't tell you what's wrong either, and nobody's going be able to tell you what's wrong. We don't have great tests in 2023 for, you know, somatic symptoms and pain and, and nerve tests and things like that. But a lot of them do have pelvic floor dysfunction. And so that is always a good place to start.

I send a ton of people for pelvic floor physical therapy, as do you know a lot of the urologists here at Penn, and, and you guys can use them too. You'll find some clusters of things that go together. People that have a lot of functional stuff going on. People with IBS, people who have anxiety, OCD, they're much more likely to have these things.

And I, you know, I have long conversations with those people about people with anxiety and OCD about that. They're not crazy. It's actually part of their disease, right? Part of their anxiety and their OCD is, is focusing on these sensations that other people, it doesn't even reach their consciousness, right?

Like, you have signals coming from all over your body to your brain all the time and, and just, most people don't even perceive those things, but people with anxiety, depression, OCD, they're much more likely to, to pick up on those minor sensations and then to focus on them.

Host: I wonder if this plays a role also in some older men who have frequency of urination. I had one older gentleman who came in and, you know, he was on maximal medical therapy for overactive bladder and BPH and so forth, and he was still getting up once at night to go to the bathroom. And he was, he was exhausted all the time cause he's getting up to go to the bathroom. And I began to wonder if maybe he was just a little too sensitive to his bladder and then actually I should probably give him something to really help him sleep so that he gets into a deeper sleep and he ignores his bladder.

Bill Jaffe, MD: That's definitely one thing that's common is just sensation. Like we do urodynamic tests on people and we find that they're, and some of them, their only problem is that they feel like they have to urinate at smaller volumes than other people do. Just like everybody has different hot and cold tolerances, everybody has different pain thresholds.

Some people are just wired that way and that that's a hard thing to treat. We send them for what's called bladder training, where they try to slowly stretch out their intervals by using distraction techniques. Like do you ever see people who their symptoms change a lot during the pandemic when they were at home?

They're going every hour, but when they're at work in the office, they go four, five, six hours, like normal. I mean, that is clearly not a bladder problem. That is a distraction and a focus problem, right? So we see that stuff all the time. But the one thing that you brought up there maybe want to remind you to talk about, one other thing if we have time is nocturia.

Host: Yeah. Let's talk about nocturia.

Bill Jaffe, MD: Okay, so nocturia, every BPH supplement that Joe Theisman advertises for prostagenics or new whatever those guys are selling. Every BPH surgery, they all say, do you wake up too many times at night to urinate? Why do they do that? Well, because it's one of the most prevalent, bothersome symptoms in men and women as they get older.

So they want to just capture as many people as possible. But of all the urinating symptoms, nocturia is probably the one that's most multifactorial and least likely to be related to the bladder or prostate. The sort of easy way for you guys to think about this is that if there's a big obvious discrepancy between someone's daytime and nighttime symptoms, it's probably non-urological.

So, you know, we see young people in their twenties who tell me they urinate 20 times during the day, but they sleep through the night. Right? That's not a bladder problem. Those people usually come in with their big 64 ounce bottle of water because someone told them that they should be pounding water all day and for whatever reason, they don't make the connection.

But, uh, I see men all the time who tell me they go three or four times during the day. They go five times at night. Not a bladder problem, almost by definition. So what is it? Well, there's, so a common thing is just sleep. And I know cause I'm 52 and this happens to me sometimes I don't sleep as well.

There are nights where between 11 and one I might urinate three or four times and I'm just not deeply sleeping. And every time I'm awake, I feel that there's some urine in there. And if I don't urinate, I'm going to have a hard time getting to sleep. So I keep getting back up and forth the bathroom and then I fall asleep deeply at one and I wake up at 5:30.

I can go four and a half hours then. That's clearly a sleeping problem. Along the sleep lines, also untreated sleep apnea can cause nocturnal polyuria. So those people make more urine when they're apneic causes them to make more urine. So, I mean, I send a few people a month for sleep studies and I have seen dramatic reductions in nocturia when people start wearing CPAP masks if, if they've been diagnosed with sleep apnea that they didn't know about before. So it's actually like one of the few times I actually get to be a real doctor and like help somebody's health and, you know, make a diagnosis like that, that's going to, you know, improve their overall health. But we do that all the time.

And then, you know, intake. People who are drinking alcohol before bed or taking, you know, a ton of medications at, at night or, you know, I've seen people that are taking their diuretic in the evening and they don't realize that's why they're waking up at night to urinate. So fluid restriction, is important.

And then also lower extremity edema. People that are pooling a lot of fluid in their soft tissues, in their legs when they lie down at night, obviously they resorb all that and they're just going to have a diuresis. So nocturia is definitely a complicated one. It's often non-urological and, you can pick up on some pretty nice things just with those sort of four, big topics. They're sleeping, sleep apnea, intake, and lower extremity edema.

Host: Yeah, the lower extremity edema is something we see, quite a bit. That patients, you know, they lie, and I explain this to people, you know, you lie down at night, all that fluid in your feet is going back to your heart, out to your kidneys, and you're making more urine. Yeah. The other thing in the summer is watermelon.

Bill Jaffe, MD: Yeah,

Host: I eat a lot of watermelon at night.

Bill Jaffe, MD: I had one guy last year who had nocturia without daytime frequency and he's like, nope, I don't drink anything within three hours of going to bed. I don't drink alcohol, no caffeine. He was a thin guy, didn't snore. And then, you know, we're talking about this stuff. He goes, wait, you know what?

He goes, I eat dinner pretty late every night and my dinner is usually a huge bowl of salad and a huge bowl of fruit. And I'm like, well, there, there you have, that's all water basically.

Host: Well, Bill, this has been great, actually really useful. These are things that we deal with all the time. We never really get to sit down with you. I'm sure if I had another colleague here, they would've thought of other questions, but we probably would've just extended the hour and we we're running out of time anyway, so,

Bill Jaffe, MD: No this was really fun and uh, thanks so much for inviting me.

Host: Yeah. And we'll have you back if the need arises and there are more questions, folks are always, welcome to email me with other questions and we could bring Bill back for, a round table discussion. So,

Bill Jaffe, MD: Yeah, happy to do it anytime.

Host: Thank you everyone for joining the Penn Primary Care Podcast. We'll see you again next time.