

Melanie Cole (Host): Welcome to the podcast series from the specialists at Penn Medicine. I'm Melanie Cole.

Joining me in this panel today is Dr. Jennifer Lloyd-Harris and Dr. Bill Jaffe. They're both Assistant Professors of Clinical Urology in Surgery at Penn Medicine.

Doctors, thank you so much for joining us today to talk about Aquablation and BPH treatment.

Dr. Lloyd-Harris, I'd like to start with you. Can you speak to other providers about the prevalence of BPH and really its effects on the quality of life of the man?

Dr. Jennifer Lloyd-Harris: Absolutely, Melanie. That's a really great question, because it gets to sort of the crux of what we're trying to treat with Aquablation.

And what we're aiming to do as urologists is we know that somewhere on the order of 38 million men in the US have BPH. Of that population though, we know that probably only about a third of them are "actively managed," meaning taking medications or choosing surgical intervention. And even a quarter of those third are choosing this wait-and-see approach.

So really, that leaves probably 80% of men with BPH, who are not actively treating their BPH.

And the reason we care about this is it's not so much the prostate itself as much as the effects ultimately on rest of the urinary tract, on the bladder, on the kidneys. Certainly, we see men with urinary symptoms that can impact their lives in significant ways. They have urinary urgency, they may have frequency, they have difficulty emptying their bladder. They have issues with retention and urinary tract infections. But also in the long-term, when something like BPH goes untreated, we see progressive things develop with the bladder with long-term difficulty emptying and kidney dysfunction, and these things are harder to treat sort of the further out you get.

Dr. Bill Jaffe: Yeah, Jen. That's great. If I could add the thing that you brought up about prostate size is really interesting. And although many people carry a diagnosis of BPH or enlarged prostate, the size of the prostate in and of itself is not terribly important until we start talking to men about medications or, more importantly, surgeries to treat their condition.

So it's really the effects that the prostate has on urinating directly and then the effects that it also has on the bladder, which is what's ultimately responsible for a lot of men's symptoms that causes them seek out our care.

Host: Dr. Jaffe, I'd like you to expand a little bit on what you just said, as far as the symptoms. What sends them to you at that point? Why is it that they come there? This is so common. Is it sort of a natural occurrence of aging for men? Speak a little bit about the symptoms that send them to you and BPH itself.

Dr. Jaffe: So Melanie, that's actually been studied. All men's prostates grow as they get older. And the impact that the size of the prostate, like we just discussed, has usually a small impact on symptoms.

The most common symptoms that men have related to their prostate are not necessarily what brings them to the doctor. So the most common symptoms that men have as they get older is the stream gets weaker, men develop some post-void dribbling.

And it's common for men and in fact women to start to wake up once or twice at night to urinate as they get older. And so those are the most common symptoms. But what people usually come to see a urologist about is when they have frequency, urgency, and they start maybe even having accidents or leaking urine. And those are generally what drives people to finally come see us. And those are really bladder symptoms that are commonly in men, at least, from the effects of the prostatic obstruction or the blockage that the prostate is causing extra work for the bladder.

Host: It really can be quite life-limiting as far as that quality. And it's true that men don't often seek treatments until their symptoms become life-limiting. How do you stratify symptom burden?

Dr. Lloyd-Harris: Yeah, great question. We're fortunate in that when we're thinking to your point of symptom stratification, we have measures, we have tools that we can use to really drill down and quantify men's urinary symptoms, as well as importantly, to qualify, you know, how much of an impact on their quality of life is it having.

Because ultimately, that's one of the main drivers of whether or not we intervene, is how much is it bothering you? And is this something that, if I could make this better for you, would you want that? And then, to speak to your point before that, I think a challenge that we face as urologists is that I think men are a little hesitant to seek care because of these perceived trade-offs.

And I think, fortunately, most of the medications we have and most of the tools we have from a surgical perspective, we don't have huge issues with things like urinary incontinence and erectile dysfunction. I would say that these are probably two of the primary concerns of men going into treatment of BPH and in considering a procedure.

I mean, certainly anatomically, they're considerations that we have, thinking about how the urinary sphincter is in such close proximity to the prostate. But we know as urologists, we can differentiate that surgically and it becomes less of an issue. But I think certainly sexual function can't be understated and the potential impact of any of these interventions on sexual function.

And when you think about things like ejaculations and you start talking about those, you have to remember that the prostate, it controls some of that ejaculatory function too, so that's certainly a conversation that we have with patients about the potential effects of any intervention on that.

Dr. Jaffe: One of the things I almost always start talking to patients about when they come to see me for "BPH" is that there are really two domains that I look at. I'm sure Dr. Lloyd-Harris does this as well.

We of course start with looking at their health. Is there a condition going to impact their health? And luckily, with BPH, it rarely does. The sort of health-related complications with BPH are relatively uncommon, but they're easy things to check.

And we almost always start our evaluation of these patients by making sure that their condition is not affecting their health. And we often talk to them about what could happen in the future that could affect their health.

But the big driver, as Dr. Lloyd-Harris mentioned, the big driver of treatment in this condition is their quality of life. And that's the second domain we look at.

And as she said, we have very good validated instruments to help us evaluate the impact that this is having on men's quality of life. And then the treatments that we have, we often talk to them about the impacts that treatments are going to have to improve their quality of life and what potential downsides there could be.

Host: Well then, expand on the treatment we are talking about today, Dr. Jaffe. We're talking about Aquablation. Tell us a little bit about patient selection, who it's indicated for, the advantages or possible complications. Give us a brief overview.

Dr. Jaffe: Sure. So Aquablation is a great new technology. We have a lot of different options for surgically treating patients for this condition these days. And Aquablation is one of the newer ones. It's a non-thermal waterjet destruction of prostate tissue that's robotically controlled. So we have an ultrasound probe in the patient's rectum to visualize the prostate and then an endoscopic piece that's fixed into their urethra that's connected to the robotic arm and the surgeon can program out using the ultrasound images what portion of the prostate that you want treated with the non-thermal waterjet.

Aquablation is really good procedure for men with almost any size prostate. It's been well-studied in men with prostates from about 30 cubic centimeters to 150 cubic centimeters. It's one of the treatments that is ideal for men that are failing medical therapy, meaning they're on medications, they're not happy with their symptoms or they have other sort of medical downstream complications of their condition. And they're progressing towards surgical treatment.

Dr. Lloyd-Harris: I'll just add Melanie, that I think one of the nice things that Aquablation adds is this ability really to create surgical map with the addition of the transrectal ultrasound, as Dr. Jaffe mentioned. We can get precise about where this tissue ablation or destruction is happening and where this tissue is being removed in a way that we don't have the ability to do with some of our other technologies.

And as Dr. Jaffe spoke to, the other great thing about it is that it's proven over time to be size-independent. And so we see definitely that there's sort of a spectrum of treatments we have and some are meant for smaller sized prostate, some for larger, but this one seems to be size-independent.

Host: This is so interesting. And what an exciting time to be in your field. Dr. Lloyd-Harris, as we've learned over the years, many of the existing treatments for BPH really involve a trade-off between efficacy and complications. Why is this?

Dr. Lloyd-Harris: I honestly think this really rounds things out. Fortunately, in urology, we have a lot of minimally-invasive cystoscopic endoscopic ways to treat guys with BPH without needing to do any intra-abdominal surgery. It's sort of used to be the paradigm that these really large prostates would have to be treated with more invasive technologies and more invasive tools.

But I think this size-independence kind of gives us that edge and gives us the ability to treat things in a way that we haven't been able to before. So I think we have for each size prostate, and then also based on what we were talking about earlier, when we talk about quality of life and we talk about potential side effects, this seems to carry with it less sexual dysfunction in terms of issues with ejaculatory function post procedurally. And I think give this benefit over some of the other transurethral procedures.

Host: How long do the results last, Dr. Lloyd-Harris. What have you seen? How have been your outcome?

Dr. Lloyd-Harris: There've been studies done to date that look at data over the past five years or so. And the efficacy seems to be equivalent to what we are seeing with some of our other procedures, things like TURP. So I think this gives you the durability that some of our less invasive procedures and certainly medications have. So reoperation rates have been studied and are exceedingly low.

Dr. Jaffe: If you look at Aquablation compared to what we were doing before Aquablation, for example, we sort of think about and, Jen, you can correct me if I'm wrong here, we think about sort of small or normal-sized prostates, medium-sized, prostates and bigger prostates. And for sort of medium-sized prostates, the standard of care has been a TURP.

And Aquablation's actually been studied in a randomized trial with TURP and was shown to be equally as effective in terms of outcomes, in terms of how patients do with their symptoms and their flow rates and how they empty their bladders and actually better in terms of safety and risk of complications.

And then it's actually also been studied in larger prostates where before we were really looking, as Dr. Lloyd-Harris said, at much more invasive operations like open surgery or robotic surgery.

And Aquablation is very effective at those larger prostates with much less invasiveness, much less disruption to the patient compared to some of the alternatives.

Host: I'd love to give you each a chance for a final thought here. Dr. Lloyd Harris, you mentioned this before, treating the whole man. Please just reiterate and wrap up for us. How does this really fit into that total picture of a comprehensive approach for men with BPH?

Dr. Lloyd-Harris: When Dr. Jaffe was talking about those domains that we look at, we're looking at overall health and then we're looking at quality of life. And I think this technology, Aquablation, offers us the ability to address some of these urinary symptoms, so address any of the difficulties urinating or irritative symptoms, that urgency, frequency, the thing that's really affecting quality of life without sacrificing in the sexual function domain and the overall urinary function domains, and also gives us durable outcome that ultimately helps prevent any future significant health problems.

Host: Dr. Jaffe, last word to you. If someone wants to refer a patient in for Aquablation at Penn Medicine, who should they contact and what would you like other providers to know about referral and the importance of early referral to the specialists at Penn Medicine?

Dr. Jaffe: Well, anybody can get an appointment by using the website, pennmedicine.org, or by calling the urology office or any providers in our system can feel free to email me or Dr. Lloyd-Harris or message us through the portal. We like to see men whenever they are bothered enough by their symptoms that they would like to make a change.

There's lots of different options as we've learned. There's lots of different options for treating men medically. There's lots of different procedural options for men. And we really do offer almost all of the available treatment options here at Penn.

So we can help them with their quality of life. And men have different preferences often about what's important to them and, as Dr. Lloyd-Harris was alluding to, that's a lot of what is important in our discussions with them: What are their goals? What are their preferences? What are they worried about? And we can offer them something that can help to meet their satisfaction so they can have a good outcome, both in terms of their urinating and also in terms of lowering their risk of complications and side effects of treatments.

Host: Such an interesting topic. Thank you both for joining us today and sharing your incredible expertise with this new technology.

To refer your patient to Dr. Jaffe or Dr. Lloyd-Harris at Penn Medicine, please call our 24/7 provider-only line at 877-937-7366. Or you could submit your referral via our secure online referral form by visiting our website at pennmedicine.org/referyourpatient.

That concludes this episode from the specialists at Penn Medicine. I'm Melanie Cole.