

It's changing the face of Medicine. Welcome to SBH Bronx health talk, produced by SBH health system and broadcasted from the beautiful studios at St. Barnabas Hospital in the Bronx. I'm Stephen Clark. Interventional radiology has been called the surgery of the new millennium by using such technologies as digital subtraction for Fluoroscopy, computed tomography, magnetic resonance, imaging and ultrasound. Interventional radiologists can often eliminate the need for open surgery and allow for shorter recovery times. With us today is Dr. Bobby Chiong, an interventional radiologist and director of the department of radiology at SBH Health System. Welcome Dr. Chiong.

Thank you, pleasure to be here.

So let's start out. What are the patient benefits of interventional radiology?

So that's a very broad question. Interventional radiology touches on almost every specialty in the hospital. The benefit that we offer primarily is being able to do procedures, so for most procedures where patients need any kind of treatment there's almost always a corollary for something that we can do using a needle and a catheter rather than having to do an open surgery.

Okay, so minimally invasive procedures obviously are a key patient benefit as far as getting them back and out of the hospital quickly.

Exactly.

These, are all same-day procedures right?

Correct. For the most part patients come in the morning and occasionally for certain procedures we'll give sedation. That sedation generally wears off after a couple hours and patients generally go home the same day.

Okay, so let's get more specific now, joint pain obviously, that's an area that you do a lot of work in.

So people generally go to the doctor for a number of reasons but at the top of that list is, something aches, something hurts. So for back pain for joint pain there's different injections that we do, there's primarily, it's going to be some kind of steroid injection whether for the back; it's kind of the epidural steroid injection. Which goes near the nerves, there inside the joint we can inject medications directly into joints and for joint pain there's also a new.. It's not quite new, but it's starting to catch on doing embolizations for joint pain because joint pain is primarily due to inflammation and we all take, most of us take Advil, Ibuprofen, Naprosyn, some kind of anti-inflammatory medication and that is a chemical way of reducing inflammation in joints there is also a way to reduce inflammation and joints. People put ice on joints and that reduces inflammation because the ice makes the blood vessels become smaller. So there's less of that blood flow to carry those inflammatory factors we in interventional radiology we

can put a catheter into the blood supply to those joints and put in just tiny particles. I, like we do, in other places to slow down blood supply we can do that to joints to slow down the blood supply and reduce the inflammation and this has been catching on as a therapy for joint pain.

And does that mean you can put off the need for open surgery like knee surgery?

Correct, so joint pain is very common as we all know and it used to be that, okay I have joint pain, okay maybe I'll take some medication for the joint pain and then I need a joint replacement. So you know we're always looking for is there anything between taking some Advil or doing the full surgery and rehabilitation that it would take to do a joint replacement. So this is one of those things that's coming along to bridge that gap.

So do you think it makes sense if somebody is experiencing say knee pain, and they're thinking well gee, I should see an orthopedist about this and maybe I'm going to need surgery. Maybe see interventional radiologist first?

Exactly. People are often surprised, oh you treat this condition how we treat that condition, that there's most conditions will have some kind of new or emergent therapy or even established therapy that people don't know about and I have a long list of things to do. Doing the interventional radiology and being the chairman of the department and it's probably something I should discuss more with my orthopedic College to let them know that this is something that we can offer to our patients here.

Okay, let's move on to a different area now. BPH, benign prostate hyperplasia, that's another area that you're working in, correct?

Yes, exactly, very common and very similar pattern of disease, inflammation is an underlying factor in a lot of things and this is inflammation and it's also something else that the prostate is enlarged and a lot of men as they get older have difficulty passing urine and treatments for prostate typically there are some medications and there are surgery and we have similar to the joint. We have a procedure in interventional radiology where again we put a catheter into the artery that goes to the prostate and we could put in particles and use those particles to shrink the prostate and this if medication has failed this can be something that will help alleviate the need for waking up in the middle of the night multiple times. Will kind of allow just so much more comfortable existence within a large prostate and not having noticed surgery.

Is this a one-time procedure?

It's usually a one-time procedure it can be repeated, it can take three to six months to kind of figure out exactly how a patient is going to respond to this procedure. So generally 95 plus percent of the time it's just going to be done once and we'll have a good result. There are certain patients for which the arteries aren't going to be good for

doing the embolization just because sometimes the arteries supply more than the prostate and or sometimes the arteries are going to be too small and there's too many of them. Ideally there'd be like one dominant artery supplying the prostate, so it's not for everybody but it's something that it would be good that people can know, oh there's a radiology treatment for that.

Do you think most people are aware of that?

I doubt it, even patients especially, and even physicians aren't always up to date with exactly what the options are for different treatments. I appreciate you for instance helping spread the word.

Okay, let's move on to a different area now, something that a lot of women experience, fibroids.

Fibroids are one of the primary out-patient consults that I get, probably make up about half of my clinic. The thing that typically adversely affects their lives, women with fibroids; having heavy menstrual bleeding, and some women they say you know the heaviest days they can't leave their house or they have to change pads every hour, multiple times an hour. So for bleeding, this especially helped when we do the catheter embolization. When we put in the catheter, and again similar to the prostate, similar to the joint, put in particles to reduce the blood supply and reduce the size of those fibroids, and for bleeding this has been well established. This has been something that interventional radiologists have done regularly for decades and the results for bleeding especially or excellent, greater than 90% reduction in bleeding and greater than 90% potency at five year. So the effect lasts a long time and occasionally we do have to repeat, it's very rare but most women are very happy with the results and again it saves the surgery because the surgery would be a hysterectomy. Which is, the uterus, it can be a big organ so that can be a fairly invasive procedure.

Does it matter the size of the fibroid, can you do larger fibroids?

Large fibroid, small fibroids, they all respond to the treatment. Arterial supplied the uterus, is much more reliable, much more reproducible, person-to-person. So I can't remember the last time I saw a uterus that didn't have a standard supply and wasn't a good candidate for embolization. So no matter the size large or small. So the large ones obviously if they're large they can cause a problem because not only can they cause bleeding they can make you feel full. You know women are often happy after the procedure when the fibroid shrinks down they have a much flatter belly, but even the small fiber is if they grow in a certain way they can stop the lining of the uterus from coming off evenly and depending on the location even the small ones can cause a problem. So large and small, we can treat them.

Another area that really I was surprised to hear that you're involved in, and this is migraine headaches which debilitate a lot of people.

Yeah, migraines very common, very poorly understood, and there's a lot of different treatment modalities out there. I get migraines very rarely, maybe once every couple of years. So it runs the gamut of how people can get migraines and how people can respond to migraines. But there is a treatment that we have where we can put a specialized catheter into this sphenopalatine ganglion. So it's a region of nerves that we can reach by going through the nose and for a lot of patients that can stop a migraine or if migraines been going on for a while that can end the migraine so.

Yeah, but if you're plagued by migraines is this a possible solution.

Well, if you're a chronic migraine sufferer, some patients if they feel maybe they're at risk of a migraine or they feel migraine coming on they can come see me for the procedure. If you're a migraine sufferer and you're not having a migraine it's not something that's gonna prevent a migraine. It's more something that's gonna treat just a really recalcitrant, you know persistent migraine.

How long a procedure is this?

One of the fastest procedures we can do. There are actually migraine patients that do this themselves. I've heard of people doing lidocaine the medicine that we use, and putting it on a Q-tip or kind of spraying it in the back of their nose and then that can help. But the way we in radiology do it with a catheter and with x-ray guidance is a more precise way of treating migraines in this area.

Do you recommend they go the interventional radiology route, versus the self-treatment route?

Yeah, the thing about migraines is a lot of migraine sufferers they know how to treat themselves and they know what they can do but as you said before not everybody knows every method. So if there are migraine sufferers out there and they've tried other things and they haven't worked I'm always happy to see them, assess them, and once they know me when they do have migraines then they can come in and get the procedure done.

Okay, in the last area which again really shocked me that you get involved in, are liver cancers and you said specifically liver cancer.

So liver cancer is one of the things that we have a lot of good data for. Liver cancer can be treated a couple ways in interventional radiology so there's a chemo embolization which similar to the joint the uterus the prostate we put beads directly to the cancer we go into the arterial system and use a catheter to directly place that catheter where the cancer is and the beads that we use there are generally coated with chemotherapy, with Adriamycin. So that allows directed Chemotherapy, directed to the cancer and in smaller cancers it's been curative, in that it can really make cancers go away. For the

most part though, those smaller cancers are also treated by surgery and they're also treated by another interventional radiology procedure called thermal ablation, where we take a needle similar to the way we do a biopsy and that needle has a microwave emitter. So similar to like a microwave oven, it generates heat energy to cook for lack of a better word, the cancer these treatments can be curative with smaller cancers and even with larger cancers up to 50%. They won't necessarily be curative but there's a life lengthening effect and it can slow the progression of the disease and because it's not systemic chemotherapy it's not chemotherapy that's injected into the vein going throughout the body. The side effects of the chemotherapy when we give it are much less almost no systemic side effects.

And I guess also if you're a candidate for transplant this could grease the skids so to speak right.

So there are different transplant criteria the one that I generally use is called Milan Criteria. So if you have a cancer that's 5 centimeters or less then you can get a transplant or if there's multiple areas of cancer if they're less than 3 centimeters the nice thing about the procedures that we do in interventional radiology is even if you're out of transplant criteria if you respond to my therapy and the cancer shrinks then they'll consider you for a transplant, which would then be the ultimate curative therapy.

Okay well, Dr. Chiong, thank you for a few minutes here today.

Pleasure's all mine.

For more information on interventional radiology and other services available at SBH Health System visit www.SBHNY.org and thank you for joining us. Until next time!