Robotic Surgery for Fibroids: What Are the Advantages?
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Introduction

Andrew Schorr:
It's said that possibly as many as 80 percent of all women have uterine fibroids, and the majority have no symptoms. So hysterectomies are often performed. It can be unnecessary. Coming up, Dr. Michelle Luthringshausen of Northwestern Memorial Hospital will discuss the benefits of robotic surgery for fibroids.

Hello and welcome to Patient Power sponsored by Northwestern Memorial Hospital. I'm Andrew Schorr.

Well, when you talk about female problems one of the ones that comes to mind is fibroid tumors, and over many years women would have hysterectomies for it. Well, that is a major surgery, takes a while to recover, if you know anybody who has had it, and also of course it affects fertility. Well, there are other options. We're going to understand fibroids and the full range of options including robotic surgery for the removal of fibroids, coming up as we continue our Patient Power program.

First I'd like to introduce you to Jill Heydenberg. Jill is from the Greektown, West Loop area of Chicago. She's 43, single, has not had children, and it is something that she's certainly been thinking about. She's in good shape, but if you go back just a few months, Jill, you were in a new job, in sales, and you weren't feeling well. Tell us about that.

Jill's Story

Jill:
That's correct. I'm definitely a fighter, and I have to run into a brick wall about a hundred miles an hour at least three times in a row before I sometimes get a clue because I was a runner and a walker and a very, very healthy eater, so just have a very tenacious personality and started a new job in February, which would require a lot of walking and then going up five or six flights of stairs to get to work. And by March, going into April it was starting to kick me a little bit where I couldn't run up the stairs, just didn't have the energy and basically would get up, go to work, come home and go to bed. And also had a lot of pressure on my bladder and I'd never had a bladder infection before and thought that's probably what I was dealing with. So sometimes the symptoms would be pretty severe, then they would go away, then I thought everything was fine.
And it got to a point by the first of June, mid June, I knew something was wrong and made an appointment with my internist and had a very complete physical from colonoscopy, upper GI endoscopies because they discovered that I was severely anemic and problems in that regard, and just kept going through the process of elimination and then had a breast and pelvic exam, and that's when the issue was discovered of uterine fibroids.

Andrew Schorr: Wow. So the doctor, stem to stern and noticed the anemia, but then it wasn't until your doctor felt something, that maybe that was the first red flag along with the anemia?

Jill: Correct.

Andrew Schorr: All right. So your internist sends you probably for an ultrasound, right?

Jill: Right. Right away.

Andrew Schorr: What did that show?

Jill: Well, they don't say a lot during the exam but I knew something was wrong because I could feel it and the pressure because it took quite a while, and within a day my internist called me and then I was referred to Dr. Luthringshausen.

Andrew Schorr: Who we are going to meet in a second. Now, let's just go over one bit of your history. You are a lady who has been in really good shape, but you have had some previous surgeries for hernias, right? You were prone to hernias.

Jill: Right.

Andrew Schorr: And you had also previous had robotic surgery, I understand, for a hiatal hernia.

Jill: Correct. Yeah. No stranger to surgeries, that's for sure.

Andrew Schorr: Okay. But also trying to keep yourself fit, eat well. You went several months before you actually went in for a full physical, so it would come and go, right?
Jill:
Correct. Yeah.

Andrew Schorr:
All right. Well, let's meet your doctor and then we're going to hear more of your story because you ultimately did have surgery, robotic surgery, for this and we're going to learn about that. But let's understand about fibroids first. Dr. Michelle Luthringshausen is an obstetrician/gynecologist at Northwestern Memorial Hospital, and one of the areas she covers is fibroid tumors.

Doctor, thank you so much for being with us. Tell us, let's hear a little bit about these kinds of symptoms and how they could sort of come and go for Jill and it wasn't until sort of the end almost of the exam, it sounds like, that it was discovered. Why wouldn't it be more obvious?

Fibroid Symptoms

Dr. Luthringshausen:
Well, fibroids are an extremely common medical condition. As you mentioned earlier, Andrew, that up to 80 percent of women have fibroids, and they tend to run in certain ethnicities, but anyone is prone to fibroids if they have a uterus in place. So many women have fibroids and never know they have them, but then quite a few will present with symptoms like Jill's where they have episodic heavy bleeding or their periods are becoming heavier over time. They don't realize exactly how much blood they're losing at the time of their menses until they start to feel the clinical signs of anemia such as shortness of breath going up the stairs or extreme fatigue and feeling completely wiped out, things that Jill described in great detail there. So that's one way that the patients could present.

Another way is pressure. She was saying how she felt pressure during the ultrasound and could feel fullness in her pelvis. These are common symptoms. Patients will feel pressure on their bladder, on their bowel to where they feel constipated, where they have to urinate frequently. They have less bladder capacity. They have to get up at night now to go urinate, symptoms like that.

And then there are also some other less commonly noted, as related to fibroids, symptoms such as varicose veins in the legs. So the pelvis is a confined space, it's a bony circle, and the uterus is within that circle or bowl, and when the uterus enlarges it can press on all of those vital structures that pass through the pelvis such as, you know, the veins that come from the legs. And pressure at the pelvis brim on those veins will cause them to dilate below. So varicose veins, pains in the legs, things like that can also be initial signs of fibroids.

Andrew Schorr:
Now, Jill, when they discovered the fibroids what did they discover, and how big were they?
Jill:
Well, rather large. Obviously it was discovered during the ultrasound, and then my internist at that point, like I said, a day or two later called me and, you know, pushed it through quickly to get in to Dr. Luthringshausen. But one was about the size of a grapefruit, one was the size of a tennis ball, and I believe two the size of walnuts.

What are Fibroids?

Andrew Schorr:
Wow. Hence the pressure, Dr. Luthringshausen, you have something the size of a grapefruit in your lower abdomen. Well, what are fibroids, Doctor? So it's not a malignancy, but what is it?

Dr. Luthringshausen:
Right. They are not malignant, meaning 99 and a half percent of the time when we think the patient has fibroids they are not cancerous growths, right. So that’s the good news. The bad news is that they arise from one cell in the uterus that loses its ability to control its growth and grows at an inordinate rate. It forms a ball of tissue much like the inside of a baseball and pushes on those surrounding structures, the normal uterine tissue and then eventually as it gets larger the surrounding organs in the pelvis.

So we basically have an attitude about fibroids is that, you know, they're not cancerous. They're worrisome if the patient has never had them before and all of a sudden they pop up, like in Jill's case. They were quite large when they were discovered in Jill's case, so in that situation we worry that they might have a tendency to be more active than a normal fibroid. There are all kinds of things on that continuum, like cellular fibroids or fibroids that are atypical in nature. And then the most worrisome thing would be sarcoma, and that's the cancer version of those muscle cells in the uterus, the cancer version of the fibroid. So we do make efforts to rule out in patients who present like Jill.

So that's a little bit different than a patient who we follow long term who we see the fibroids first when they're only a centimeter in size or the size of a blueberry, and then we follow them and they grow slowly, predictably over time, generally one to two centimeters in diameter each per year. So you can see how if you have multiple fibroids over time the uterus can grow at an astronomical rate and you can end up with large fibroids like in Jill's case.

Andrew Schorr:
Now, I mentioned earlier and as I recall, the traditional approach when intervention was needed was hysterectomy. So a woman loses her female organs and with it fertility. We've come a long way since then, haven’t we?
Dr. Luthringshausen:
Yes, we have. And in Jill’s case, even with traditional open surgery in a patient who wishes to maintain her fertility we are between a rock and a hard place, basically, and we try to preserve her fertility as best we can and remove the offending fibroids, and that is called a myomectomy. And in the traditional sense that was done open, so with an incision that looks like a C section scar. And those incisions require a six- to eight week recovery, and the uterus is bruised and swollen, and it’s actually a recovery that is worse than the recovery from a hysterectomy itself. It’s also a surgery that carries higher risks than the risks involved in hysterectomy such as the formation of adhesions or scar tissue. It’s a much higher rate of formation of scar tissue in a myomectomy as opposed to a hysterectomy.

And blood loss during those surgeries is much greater because the blood supply to the uterus remains intact during that procedure while we open the uterus and shell out these fibroids and then close those defects, you know, the uterus is bleeding that entire time. So the patients frequently will need blood transfusions during open traditional myomectomies.

Andrew Schorr:
All right. I just want to make sure I understand this. First of all, Jill, preserving your fertility was important to you.

Jill:
Yes, absolutely.

Andrew Schorr:
Okay. You were still having periods, 43. It’s still something you think about, about having a baby, right?

Jill:
Right. I have had like clockwork. I know it’s a cliché, but I’ve never missed a period. It’s always starting on the same day almost to the hour, so.

Removing Fibroids and Preserving Fertility

Andrew Schorr:
All right. So, Doctor, just to restate what you said, I want women to understand. So a woman in Jill’s case if she said, Doctor, yes, I want to get rid of the fibroids but I want to preserve my fertility. I understand one approach would be, not worried about fertility, would be just take everything out, have a hysterectomy, but if you do the myomectomy the open way what you were saying was that’s a bigger surgery and bigger recovery.
Dr. Luthringshausen:
Yes, it is. That's why we are very fortunate now to have these new technologies available to us where we can offer patients faster recoveries, less blood loss, quicker return to work, better recoveries with these newer technologies, such as laparoscopy and robotics.

Andrew Schorr:
Well, let's talk about robotics. I've previously done programs, let's say with urologists related to prostate cancer surgery, and I know it's been a really good thing there. Where does a robot in the operating room help you do this surgery and where less blood loss, quicker recovery, explain that to us.

Dr. Luthringshausen:
So there's real advantages. First of all, I'll start with laparoscopy because basically robotics is laparoscopy with a very expensive piece of equipment. So laparoscopy involves the small incisions that are less than a centimeter each, generally, and that's at the umbilicus or above, bellybutton or above, and then usually one in each lower quadrant like right next to the hip bone.

And those procedures in the past have been limited because of several issues. First of all, you give up your wrist motion as a surgeon when you use laparoscopic instruments. They only have rotational ability, and your motions are interpreted indirectly. What that means is that when I'm operating with straight laparoscopy I'm looking at a screen, and I have long instruments, thin instruments through these ports in the patient's abdomen, and if I move my hand toward the floor the tip of the instrument moves toward the ceiling. So it's an indired interpretation of motion. So that's limiting.

Suturing is extremely difficult with straight laparoscopy. Like throwing stitches and tying knots requires a very high level of skill, and therefore not that many surgeons are proficient at that. What robotics adds are a few things. First of all, we get our wrist motion back. Okay? So anything I do with my wrist the tip of that instrument can do. It takes my motions and it grades them finely down. It eliminates surgeon's tremor. My motions are directly interpreted by the robot so there's none of that indirect interpretation like straight laparoscopy. That all translates into more precise surgery, less blood loss.

The other advantage is that the optics, the video camera for the robot is 3D. So it has two eyes. I see 3D just as if I were inside the patient, okay, whereas straight laparoscopy is 2D. So that gives us depth and dimension, and that really helps us do a better job with fine surgery, suturing, things of that nature. It cuts back on blood loss. It makes us more precise surgeons.

And the robot doesn't move. Okay? So where it's docked at the patient's skin, where the ports are at the patient's abdomen, those sites all rotate only on a
fulcrum, meaning that we don't pull and push and torque on those incision sites like we do in straight laparoscopy. So what that translates into is much less postoperative pain for the patient. So several advantages.

One other one is that the instruments are longer with robotics. So we're able to do patients who are larger. Jill's not, but it enables patients who wouldn't have been considered appropriate for straight laparoscopy to receive laparoscopic surgery once we add the robot there. And bigger uteruses. We can do uteruses that go above the bellybutton, so we are now able to reach all the way down into the pelvis with our instruments where we were not able to previously. So those multiple reasons that we feel that the robot offers many advantages to the patient.

Andrew Schorr:
Wow. We're going to talk more about that, but let's just ask Jill. Jill, so you had the robotic surgery and all this had been explained to you about the advantages of that versus open surgery to preserve your fertility. Well, if we were to look at your belly now, no big scar, right?

Jill:
No big scars. They're very tiny and healing very well and not even tender. So the opposite, you know. If it was open surgery it would have been a lot worse, so. And then I'm uncomfortable with that too just due to the fact that I'm prone to hernias. So any time there's bigger cuts there's just a greater risk for hernias for me down the road.

Andrew Schorr:
Good point. Now, what about recovery? How was your recovery?

Jill:
Not bad. I did spend the night in the hospital, and I think some of that was just due to the concerns with my blood, and Dr. Luthringshausen can answer that better. You know, it's painful, but it was my second, this was the robotic surgery. The first one I had was the laparoscopic with the hiatal hernia. Just some of the side effects, but the pain from the surgery itself was less troublesome to me than having two or three different IVs and a catheter, and it was the little things that were driving me nuts. But the pain in itself in the hospital, you play through it. It wasn't the type of pain where I wanted to die, but it was pretty intense.

Andrew Schorr:
Right. But we should also say though one of the things for you, and you learned with all the surgeries you've been through before was you had always an adventure with anesthesia, and some of that is recovery from that too, right?
Jill:
Correct. Yes. Right. But the first couple of weeks were fairly intense where I was not sleeping well or sleeping through the night. Could not wear pants or jeans, anything that would be a little more form fitting just because of the discomfort and the pressure that it put on my abdominal area.

Andrew Schorr:
Doctor, let me ask you. Now, Jill had, imagine, like a grapefruit-sized fibroid was one of them. Does the size of the fibroids removed relate to the recovery, how you feel afterwards?

Dr. Luthringshausen:
Yes, certainly. What Jill is describing with two weeks of pain is actually vastly different than what the patients would tell me if they had had an open myomectomy. They would not be able to walk a block until they were about six weeks out. So, as I had mentioned before, she underwent one of the most difficult surgeries to recovery from, and that's a myomectomy, and it is painful. And the larger fibroids and the more fibroids we remove the more suture material we have to leave in the uterus, the more bruised the uterus is. Those types of things do lend themselves to tougher recoveries. You know, if it was just one single fibroid that I had to take out that was a golf ball or smaller in size the recovery is significantly different. And her case was one that was unusually difficult, so I do want to point that out.

And she did magnificently in her recovery. So, you know, it's hard for a patient to have a perspective of what things would be like had they had a different procedure, but coming from the side of a surgeon who did open myomectomies for many, many years before we had this robotic option, we're just amazed at how well these patients are doing.

Andrew Schorr:
Well, let's get to the bottom line for you, Jill. Jill, you were not doing well through the spring, trying to do well in a new job, anemic, tired, pressure. How are you doing now?

Jill:
Exceptional. I am nearly a hundred percent. Each week that goes by, I have absolutely no pain or any pressure or any difficulty whatsoever. And immediately after the surgery while I was still in the hospital there was no pressure on my bladder. I could feel a difference. Even through all the pain and the swelling from surgery that went away immediately. And then again the first two, two and a half weeks I was moving slow a little bit walking, and some discomfort, and my energy level is just about normal, close to a normal appetite. I'm a very healthy eater and becoming more and more active. So I'm very blessed.

Andrew Schorr:
So no regrets.
Jill: None. None whatsoever.

Andrew Schorr:
Okay. We're going to talk a lot more about your experience, hear more from Dr. Michelle Luthringshausen as we talk about fibroids, understand more about the robotic surgery, the whole procedure, what the other options are as well, as we continue our discussion on robotic surgery and other options for the removal the fibroids in women as we continue after this.

Determining Appropriate Intervention

Andrew Schorr:
Welcome back to Patient Power. Andrew Schorr here with Jill Heydenberg from Chicago who had robotic surgery to remove fibroids in her uterus, one the size of a grapefruit and then others that were a bit smaller, but a big deal. But she's doing well. It preserved her fertility as best we know, and she's very grateful to the care in this case that she got at Northwestern Memorial Hospital. Her surgeon is with us, and that's obstetrician/gynecologist Michelle Luthringshausen, and we're learning about, as she said a minute ago, really for surgeons who have done the more traditional open surgery. With the advantages of laparoscopy and then on top of that robotics it's really been amazing and a quicker recovery, lots of advantages.

Dr. Luthringshausen, let's understand, how do you determine when any kind of intervention is needed? Because as we said many women have fibroids but they're simply followed or they may not even know it.

Dr. Luthringshausen:
Well, we go by their symptoms and how they affect their daily living. So in Jill's case for example she was finding it difficult to do her normal routine for her job and difficult to do her normal activities as far as running and walking and things like that. So we go by how much it's affecting the patient's life.

And then also by medical indications like anemia. So in Jill's case she had obvious anemia on her testing and her symptoms. But not all patients who have fibroids, even patients who bleed quite heavily, they may not have anemia because their bone marrow is very efficient at catching up after they lose that blood with their menses. So unless you catch them right at the right time when you do the test you may not find anemia. So anemia is not a requirement. It's just something that when we see it we know that this is the real deal. Okay? And also it has implications for surgery itself. It means that we may need to transfuse them before surgery or during surgery because they have a higher likelihood of needing blood.

Other symptoms like the bladder pressure and the bowels, those kinds of things, they are subjective, you know, and we go by how much it's interfering with the patient's life. Is she able to sleep through the night or does she have to get up three or four times to urinate because she has no bladder capacity. She may have
difficulty even initiating voiding or urinating because of pressure on the bladder, the neck of the bladder. And patients may have a real difficult time with their bowel movements as well. If they don't keep their stool very soft or if they get backed even a little bit they may not be able to go at all, something called obstipation, that is seen with large fibroids.

And then there's one other indication that is a silent indication that we have to look for, and that is obstruction of the ureters. The ureters are the tubes that carry urine from the kidneys to the bladder, and they pass right over that pelvic brim that we were talking about earlier. And if the fibroids are more than 12 centimeters in size, or the uterus is more than 12 centimeters in size, it comes outside of that pelvic brim, then we have a pretty high rate, somewhere around 50 to 60 percent of those patients are going to have evidence of compression of their ureters.

And the problem with that is that the urine backs up interest the kidney, the kidney swells, something called hydronephrosis, and that can actually knock off a kidney, and kidney function is extremely important, as you know. So that is something that can be happening silently and we have to look for in patients who choose not to do anything about large fibroids. Like they want to observe and the uterus is larger than 12 centimeters, then I would always order a CT scan looking at their renal function and how the urine passes from the kidney through the uterus into the bladder to make sure that that system is not being affected silently.

Andrew Schorr:
All right. So we were talking about who needs surgery, who doesn't, what all the symptoms are. So if a woman goes in to the doctor and here we had been told by Jill she had this whole big physical, how is it usually discovered? And then what imaging exams maybe tell the story?

Dr. Luthringshausen:
Typically it's discovered on exam, and the patient may be complaining of something or may not be complaining of anything, may not be aware that the uterus is enlarged. But during the pelvic exam we may feel that there is a mass in the area of the uterus, and our hands are not MRI, so we order imaging to make sure that it could possibly could be an ovarian mass or a bowel mass or something else. So we order imaging, and generally we start with an ultrasound unless the mass is quite large and extends into the abdomen.

So ultrasound can show us the presence of fibroids, and it is the gold standard for pelvic imaging. And if the uterus is larger than what we think the ultrasound can take care of, which is generally about 20 centimeters of mass, then we would order an MRI. And the MRI can really delineate the location of all of the fibroids, the size, the vasculature, and evaluate the ovaries as well.
Andrew Schorr:
Now, are there any other tests that might come in to play as well? There's one my wife had one time, I don't know if it was for this, though. Histo, I can't even say it. Histosal...

Dr. Luthringshausen:
Histosalpingogram?

Andrew Schorr:
Yeah.

Dr. Luthringshausen:
Okay. So the histosalpingogram is a radiographic test where they put a radio opaque, a dye, that shows up on a radiograph in through the cervix, and it opens up the cavity of the uterus. And that test is mainly used to show that the fallopian tubes are open. Okay? Because we see the dye pass through the fallopian tubes and spill into the pelvic cavity on imaging. It can sometimes show us fibroids that are located inside the uterine cavity, called submucous fibroids, but it is not going to give you the outlying, the outer contour of the uterus, so it's helpful in some situations but it's limited in that it mainly evaluates the inside of the cavity of the uterus and the fallopian tubes.

Andrew Schorr:
All right.

I want to go back to what to do next. So we talked about hysterectomy of course. We talked about open myomectomy. We talked about laparoscopy and the advantages of a robotic laparoscopic approach, if you will. Now, I've also heard that there are other approaches maybe done by other physicians. Could you help us understand what other options there could be and from your point of view where they come into play?

Dr. Luthringshausen:
There are other options for women who do not desire future fertility. So there is something called a uterine artery embolization procedure that is performed by interventional radiologists where they make an incision in the groin, in the femoral artery. They pass a catheter to the uterine artery itself on the same side as their incision. They release tiny vinyl beads, hundreds and hundreds of them, and they travel down the artery supply, the blood supply coming in to the uterus and basically block the blood supply to the entire uterus on that side. And then they traverse the bottom part of the aorta where the aorta splits and go to the other side and thread down to the uterine artery on the other side and do the same thing.

These vinyl beads are permanent, right? So it's significantly altering the blood supply to the uterus. And as far as future pregnancy we're uncertain as to how future pregnancies progress, what are their outcomes. Really, the data is not there, and this procedure is preserved for women who do not desire future fertility.
So that procedure basically will shrink the fibroids by about 40 percent each, but it doesn't eliminate them. And we don't know the long-term outcomes, meaning that you're still going to make new fibroids, probably, or the fibroids that were embolized are going to eventually resume their growth.

So it's a nondefinitive procedure, as is the myomectomy, right? Because we're not removing the uterus so she can always make new fibroids, but at least we're maintaining the normal blood supply to the uterus when we do a myomectomy. So the uterine artery embolization is really not appropriate for women who want to maintain fertility.

And other than that there are procedures that we can do for bleeding such as ablations where we remove the lining of the uterus and things like that, but, again, that's for women who do not desire future fertility because you can't remove the lining where the embryo would implant and then have a normal pregnancy.

**Andrew Schorr:**
Let's talk about fertility then. So Jill's dream, she wants to preserve that option, is to have a baby, so if Jill comes back to you or one of your colleagues there, would pregnancy be any riskier or any other concerns since she's had myomectomy?

**Dr. Luthringshausen:**
Sure. Any time we make incisions on the uterus itself we worry about labor. We want to know how is that uterine muscle that we had to divide and then reapproximate, sew that together, how is that going to hold up? How is that scar going to hold up during labor. So when patients have extensive myomectomies, such as Jill's, we typically would encourage them to have a C section at the time of labor. So when labor initiates they come in and they get a C section rather than going through the typical 18-hour first labor with the risk of rupture of the uterus. Although they have those incisions that risk of rupture less than one percent. It's just that if it happens it's a disaster, both for the mother and the baby, so we want to avoid that.

**Andrew Schorr:**
What about just getting pregnant? Would it be any more difficult to get pregnant if you have had that surgery, the implantation of the egg, etc.?

**Dr. Luthringshausen:**
Only if scar tissue somehow limits the motility of the fallopian tubes or the fallopian tubes become scarred after the surgery. Only in that way does it decrease fertility. And that is just totally dependent on how the patient heals. We do things at the time of surgery to reduce scar tissue formation. We use adhesion barriers during the surgery. At the end we spray a substance that prevents scar tissue from forming. We sometimes place a piece of GORE-TEX over the incision site so that bowel doesn't stick down to it or fallopian tube doesn't stick to that incision site on
the uterus. So we do make efforts to reduce adhesion formation, but we know that these patients still are going to form some adhesions. We just hope that they form in a good manner.

**Andrew Schorr:**
Now, Jill, did anyone in your family have fibroids that you know of?

**Jill:**
Not to my knowledge, no.

**Where do Fibroids Come From?**

**Andrew Schorr:**
Well, that brings up the question, Doctor. Where do they come from? Are some people at higher risk? Does it have anything to do with diet? Where does it come from?

**Dr. Luthringshausen:**
This is a really common question that I get because patients like Jill feel like this just fell out of the sky and landed on them. And in fact it just does because it is an extremely common medical condition in women. Some women will have generations and generations of fibroids, like every woman in their family has had a hysterectomy for fibroids. That's different from Jill's case, but there seems to be a genetic component, but that's not the only reason that women get fibroids.

As far as diet is concerned, you know, Jill talks about the fact that she has an excellent, healthy diet. It is not related to diet at all. And there's no known dietary changes that can decrease the growth rate or eliminate fibroids. So basically women have this predisposition to develop them, and then in some women, typically in women who have high levels of hormones like women who are overweight or obese, have a higher rate of fibroid formation because they respond to both estrogen and progesterone and those women have higher levels of estrogen. And then in women who just have a genetic predisposition. And then in other women it just happens, and we really don't have an explanation at this point.

**Andrew Schorr:**
All right. I just want to probe one thing here because we got questions e-mailed to us. One is from Sofia in Summit, Illinois. She said she's heard that there are certain lifestyle changes, diet, that can make fibroids go away. Sounds like you just are not familiar with that. And then also our producer Jamie was just messaging me and saying, well, what about red meat? Does that raise your risk of fibroids?

**Dr. Luthringshausen:**
No, red meat does not raise your risk of fibroids. In fact we see fibroids in many vegetarians. There is no diet that I am aware of, and I've looked at this even as recently as the past four months, in the literature that has been proven to be
effective at reducing fibroid growth. Now, there are some herbal remedies that I have seen patients use that can decrease the amount of bleeding that they have by altering their hormone levels, but that doesn't affect the growth rate of the fibroids. They are independent of diet, herbs, anything.

And the same is true of birth control pills. I think there's a misconception out there that birth control pills increase the risk of fibroids, and they actually don't. We've looked at this, and there are many studies in the literature that look at the formation or the new diagnosis of fibroids in patients on pills and not on pills, birth control pills, and there's no difference between the two groups. And the growth rate of the fibroids whether you're on birth control pills or not on birth control pills, there is no difference in how fast they grow.

So even something pharmaceutical doesn't affect the growth rate of these fibroids. There are many medications that are in trial right now to slow the growth rate of fibroids by blocking the receptors on the fibroids, such as the progesterone receptors and the estrogen receptors, but they're tricky because you need progesterone and estrogen in other parts of your body, so trying to target just those fibroids is where they're going with that.

Andrew Schorr:
Is there anything we know of that will help a woman have her fibroids shrink without other intervention? Anything she can do?

Dr. Luthringshausen:
Unfortunately, there's not. And I'm open to this. I have had patients who come and say, I have a Chinese herbalist in Chinatown, and I'm going to try this for four months and then I'm going to come back. And I say, okay. Call me if you're bleeding heavily, right, and I give them all the precautions. And they go and try and they come back and nothing changes the growth rate of these fibroids. It's frustrating. I know it's frustrating for the patients. It's frustrating for me. It's frustrating that really we are, like I said earlier, stuck between a rock and a hard place where really for a woman who has significant symptoms of fibroids and wants to preserve her fertility we really don't have any other option other than the myomectomy.

Listener Questions

Andrew Schorr:
Here's a question that came from Dana in Oklahoma City. Dana writes, "I've read that there's a higher risk of recurrence if you have a myomectomy. Is that true?"

Dr. Luthringshausen:
A higher risk of recurrence of fibroids?

Andrew Schorr:
Fibroids, yeah.
Dr. Luthringshausen:
I have not read that. We know that for some reason those women who have fibroids in the first place have a tendency to make fibroids, and there's nothing that we can do to prevent the formation of new fibroids. So I think just having the fibroids in the first place increases your risk of having more. So I don't know how that study was conducted or whatever she's referring to, but yeah. We see about a 50 percent recurrence rate in patients who have myomectomies. And Jill and I talked about this before her surgery, that, you know, I'm going to take out these fibroids now, but there's about a 50 percent chance that I'm going to have to do something again or we're going to have to do something again in the future, typically at about the five-year mark, for new or persistent fibroids.

Andrew Schorr:
Jill, you're aware of that risk. You don't worry about it, but you know you have it.

Jill:
Right. I don't worry about it, not at all. I mean, if it happens, it happens, so.

Andrew Schorr:
Doctor, so what do you do? So if Jill needs some intervention again you'll see what you're dealing with, but what would the options be? Or would that just vary by what the situation is?

Dr. Luthringshausen:
It would really vary. Like say she doesn't have problems again until she's 48 or 49, and then she's not in the same place that she is right now. You know, maybe she's already had two children. Maybe she hasn't had any but now she's not really looking to have any. Lots of things can change in the patient's personal situation during that, you know, classical five-year interval, so we just reevaluate everything at that time.

Andrew Schorr:
One other question before we take another break, and that is Janet from Chicago wrote in, "Is there a relationship between fibroids and cancer? Or even if someone has surgery does that raise their risk of cancer?"

Dr. Luthringshausen:
So the answer is no. Fibroids are not a precancerous condition. Okay? In old textbooks and in old medical literature you might read that there is a certain percentage of fibroids that could degenerate into a malignancy or a cancer, but that is no longer believed to be true. So in fact sarcomas or cancers that are of the same tissue that fibroids are made of, arrive by themselves, new. Okay? They're not arising in an existing fibroid. So if I have a fibroid that I've been following for five years in a patient I'm not worried that that fibroid is going to change into cancer, ever. Okay?
So surgery itself, that's a difficult question to answer. I would say, no, it doesn't predispose the patient to cancer of the uterus at all, but there are some mechanisms that we don't fully understand about healing and immune system and things like that, so I wouldn't say no absolutely, there is no increased risk of cancer. But sarcomas of the uterus are extraordinarily rare cancers. We probably see a couple a year here at Northwestern. They're extremely rare. And for the numbers of patients that have fibroids and the number of patients that have surgery for their fibroids my gestalt would be that there is no increased risk because of the surgery.

**Andrew Schorr:**
All right. We have more to talk about including more understanding of the details of robotic surgery for the removal of fibroids when we continue our Patient Power discussion with Dr. Michelle Luthringshausen, an obstetrician/gynecologist and specialist at Northwestern Memorial, and her patient Jill Heydenberg. We'll be back right after this.

**Robotic Surgery**

**Andrew Schorr:**
Welcome back to Patient Power and our discussion about surgery for fibroids and understanding fibroids in general, all the options. We want to get back to that approach that Dr. Luthringshausen, who is a very experienced surgeon, is excited about, and that is robotic surgery. Dr. Luthringshausen, first of all, how long have you had this robotic approach for the myomectomy?

**Dr. Luthringshausen:**
The robot has only been in use in the United States for about five or six years now, well, this particular robot system which enables us to really do this surgery. We started doing this procedure here at Northwestern in October of 2007. So we've done many now at this point and are collecting data to compare outcomes with the robotic approach versus the open, traditional approach.

**Andrew Schorr:**
So your experience, though, your wisdom just doing this over many years with different approaches, it sounds like you are excited about it.

**Dr. Luthringshausen:**
I am very excited about it. I feel that in the past we didn't have a good option. We didn't have something that I could say you're going to feel pretty good after this and you're going to be able to return to work by four weeks. There was nothing like that to offer these patients, so I'm really excited that we're able to make their lives a little bit better this way.

**Andrew Schorr:**
And, Jill, the recovery time and getting back to work, that was important to you.
Jill:
Yes, absolutely. Just to be productive for my employer and my own lifestyle and to get back into good health mentally, emotionally and physically.

Andrew Schorr:
Now, Jill, the surgery, as we gather from you, is not a small surgery. From your recollection how long was it?

Jill:
I believe it was between five and six hours.

Andrew Schorr:
Now, I know that's going to vary. Dr. Luthringshausen, tell us what a woman could expect. So she had, I think, four fibroids we talked about, one really large, and it's not a small surgery. But just take us through it, what a woman would expect, how long she'd be in the hospital, how long a surgery might be, etc., the details.

Dr. Luthringshausen:
Sure. As I mentioned earlier Jill's case was a more difficult case, and it did indeed take five and a half hours I believe. But basically you arrive at the pre-op holding area approximately an hour, hour and a half prior to your procedure. And there you meet the anesthesiologist, you meet the whole surgical team. You get your IV placed. You get consented, you know, go through the formal consent form, have that signed. We mark the patients abdomen. That is just a formality just so we know once she's prepped and draped that that's my patient.

And then when they get back, roll back into the room, the operating room itself, the first hour or so is actually positioning the patient, scrubbing the patient, anesthesia induction time, meaning that they get all their monitors on, they get their access if they need more IVs and all that. All that is put in after the patient is asleep. So we oftentimes don't even begin operating until about an hour or an hour and a half after we're in the room.

And then the procedure itself varies based on the number of fibroids, size of the fibroids, size of the patient. There are many factors that go into that, and these procedures are particularly long because of the multiple things that have to be taken care of. Right? So we have to shell out the these four fibroids out of the uterus. We have to close those four incision sites in three to four layers of suture each. We have to put in our adhesion barrier that we talked about, either the Gore-TEX PRECLUDE membrane or the spray.

We have to then get the fibroids, which, you know, a 10-centimeter or 11-centimeter fibroid that Jill had, out through those little incisions, and that requires something called morcellation, where we use a titanium circular blade. It's basically like an apple corer that spins, and we put a grasper down through the center of it. It's hollow in the center, put a grasper down, pull the fibroid tissue up to that blade, activate the blade and remove the fibroid in core pieces. And that
takes approximately an hour, an hour and a half, depending on how much tissue you have to remove. So because of the multiple steps of the procedure it all adds up, and you end up with a five and a half hour surgery.

**Andrew Schorr:**
Wow. Okay. What about recovery in the hospital?

**Dr. Luthringshausen:**
It depends on the time of the case. So the typical 7:30 a.m. cases in patients who don't have adverse reactions to anesthesia and don't need blood products during their surgery, don't have any issues with urination after their surgery, those kinds of things, those patients can go home the same day. And that is our goal for most of our patients who are the first a.m. case for robotics. Even the second case of the day will oftentimes go home.

It's the patients who are the prolonged cases, like Jill's, or prolonged exposure to anesthesia, perhaps needing blood products, things like that, those patients we watch a little bit more closely, so we keep them for a 24-hour observation overnight. And I don't think I've ever had a patient after a robotics case stay more than the 24 hours, and that is probably less than 15 percent of the patients get admitted for the 24-hour stay. So the vast majority are going home same day of surgery.

**Andrew Schorr:**
Now, Doctor, you described the advantages from your perspective and also your opinion of the patient's advantages related to the robotic surgery. Not everybody does this, and not everybody who could have the funds at their institution to purchase a robot has the expertise. So how does a woman select someone who is experienced with this where it can maximize the advantages? What questions should they ask?

**Dr. Luthringshausen:**
That's a problem that we have even within our own institution, and we're actually trying to combat that with patient and physician programs, outreach programs such as this one. And for a patient oftentimes they'll just get offered what their general Ob/Gyn knows how to do. So unfortunately I think that a lot of the investigation into what their options are falls on the shoulders of the patients themselves. So in that scenario I think that listening to teleconferences such as this, getting online and looking up minimally invasive surgery options at the different institutions in that patient's area, looking for surgeons who can offer all of the options, it's not like I don't do open surgery too when it's necessary, it's just that because I went and gained this skill in robotic surgery I now have one more thing in my repertoire. I have one more thing to offer that patient. So I think that unfortunately a lot of times the patient is going to have to seek out physicians who offer those services through online searching.
Andrew Schorr:
What would be a question as far as asking about someone's experience? Like for instance would an appropriate question be, do you do robotic surgery and how many have you done?

Dr. Luthringshausen:
Absolutely. I think any time a patient has any major surgery they should always have a good idea of the experience of their surgeon. You can't always rely upon age or, you know, they look like they're an experienced surgeon or they speak like they're an experienced surgeon. I think that it's fair for a patient to ask specifically how many of these have you done in the last year and what approaches do you offer. Do you have any experience with robotic surgery, how many cases have you done, I think those are all fair questions.

Andrew Schorr:
So, Jill, do you feel you made a good choice?

Jill:
Yes, absolutely. The best choice.

Andrew Schorr:
And your care at Northwestern?

Jill:
Exceptional.

Andrew Schorr:
Oh, I'm glad to hear that and that you're doing well.

So, Doctor, we talked about the advantages. To really give everybody a balanced picture though, surgery is surgery. I don't know if there are any unique risks related to robotic surgery, but maybe we should just help women understand if surgery is one of the things that they're considering what could be the downside.

Dr. Luthringshausen:
So any surgery carries the three basic risks of bleeding, infection and damage to surrounding organs. So with robotics, even though we are decreasing the amount of blood loss that occurs at the time of surgery, and that's been proven, a significant decrease in blood loss even over traditional laparoscopy, that patient still may need blood products. So that's always a risk, especially if they come in starting off very low with their hemoglobin. They just don't have much reserve, so any blood loss may not be tolerated at the time surgery and we may have to give them blood products. So we always talk about that.

We always talk about the risk of infection, which we do multiple things to decrease. And the most common types of infection are simple ones like a bladder infection from the catheter placed at the time of surgery. But wound infections, although
much less common in these small incisions, could still occur. Or infections, inside the abdomen or in the uterus itself, although rare, could still occur.

And then damage to surrounding organs, in this case we're predominantly operating on an enlarged uterus and all the organs are therefore pushed out of the way, but the bladder is anterior to the front of the uterus, and the bowel is posterior, in the back of the uterus. You have all those vital structures, arteries, veins, ureters, passing over that pelvic brim. We want to make sure that those are out of the way. And we do things to prevent damage to those organs while we're operating, but there's always a chance that something could get injured inadvertently and have to be repaired at the time of surgery. Or even present late, like two weeks out from surgery. Sometimes we'll get thermal injury or burn injury from electric surgery that we use during these procedures. It's rare, less than one percent of patients, but it can occur, and those things might require future surgery.

So these are things that we talk about that can occur at the time of surgery, plus the other risks such as the scar tissue formation, decreased fertility, things like that that we talk about that are specific to this myomectomy procedure.

Andrew Schorr:
What about follow-up for Jill and other women who have had the procedure? First of all, we talked about the chance of other fibroids, or also looking out for adhesions etc.

Dr. Luthringshausen:
Well, it's hard to find adhesions. You can't see them on imaging. Patients typically don't have any complaints about the adhesions. It's usually something that's found on a subsequent surgery or when it results in infertility or something of that nature or results in a bowel obstruction or something like that.

Andrew Schorr:
And monitoring for other fibroids.

Dr. Luthringshausen:
And monitoring for other fibroids is exam. So Jill was seen every two weeks in the immediate post-op period, and then once we feel she's fully recovered from surgery then we spread it out, and we say, you can come back in six months or so, and we monitor with uterine exam. And if I feel like the uterus it enlarging again then we go back to our imaging.

Andrew Schorr:
Just to come physical circle then. We had talked about the advantages, the risks. So how many years have you been doing OB-GYN?

Dr. Luthringshausen:
This is my ninth year in practice. And I'll just clarify that I don't deliver babies. I don't do the obstetrics of the OB part.
Andrew Schorr:
Right.

Dr. Luthringshausen:
So I was hired directly into the gyne and gyne surgery section of the full-time teaching faculty at Northwestern. So in that nine-year period I've been doing just gyne and gyne surgery.

Andrew Schorr:
Well, my question then is over those nine years with the addition of the robot and maybe where you think it's headed, how big a deal is this for women who may need surgery?

Dr. Luthringshausen:
I think this is fabulous. I think this is unbelievable for patients in Jill's specific situation and then in many other applications that we're trying to the robotics and finding that the patients do so much better. So we're excited about it. It's always good to have a new technology that proves to be beneficial to the patient.

Andrew Schorr:
Amen. And it continues to move forward.

Dr. Luthringshausen:
And it does. And the instruments are just getting better. We're getting a bigger selection of instruments to use with the robot. And, you know, the skill level. There's a learning curve, and the more you do the better you are at it as with anything, including, you know, soccer or calculus or whatever it is. So we feel like we're getting very comfortable with this procedure at this point.

Andrew Schorr:
Well, Jill and I are both very glad you're good at this. She scores a lot of goals with this, huh, Jill?

Jill:
Absolutely.

Andrew Schorr:
Okay. Well, Jill, let me give the last word to you. And that is there are women listening who have maybe been told they have fibroids or they are looking into it for themselves or another one, trying to decide what to do. It took you a while to get to the doctor.

Jill:
Right.
Andrew Schorr: So what would you say to a woman who is concerned?

Jill: I would say to pay attention to your body and be proactive and don't put off exams. And make a decision. Don't drag things out. I mean, if you have fibroids move forward and make a decision with your doctor on what the best course of action is. Don't live uncomfortable and don't live in pain and let something alter your quality of life.

Andrew Schorr: And you're so glad you did.

Jill: Oh, absolutely.

Andrew Schorr: Finally got to it. And I wish you well. If a baby is in your future, you'll have to send me a picture, okay?

Jill: I will.

Andrew Schorr: All right. And I think you know a good OB-GYN department to go to that can help should that come up.

Jill: Absolutely.

Andrew Schorr: Well, Dr. Michelle Luthringshausen, thank you for being with us on Patient Power.

Dr. Luthringshausen: Thank you, Andrew.

Andrew Schorr: And thank you so much, Jill.

This is what we do on Patient Power, and I'm so grateful to our sponsor, Northwestern Memorial Hospital, for helping us connect you with leading experts, inspiring patients who have very interesting stories to tell. There's a vast library of programs that we've created with Northwestern experts, so be sure to check it out.
We'll be back with another program coming up. We're going to do it on something not unrelated, pelvic floor health. We'll have Dr. Ann Marie Boller. Thank you so much for joining us today. I'm Andrew Schorr. Remember, knowledge can be the best medicine of all.

Please remember the opinions expressed on Patient Power are not necessarily the views of Northwestern Memorial Hospital, its medical staff or Patient Power. Our discussions are not a substitute for seeking medical advice or care from your own doctor. That’s how you’ll get care that’s most appropriate for you.