

Robotic Surgery in the Management of Gynecologic Malignancies

Webcast

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INTRODUCTION

Andrew Schorr:

Hello and thank you for joining us once again on our Patient Power webcast we do every two weeks with Northwestern Memorial Hospital. I'm delighted to do it, and here we are in the darkness of winter. But you know health concerns go year around, and one concern for women is you go in for those pap smears and other exams, gynecologic exams, and you always fear, Well, what if the test comes back abnormal? What if, Oh, my god, I'm diagnosed with a cancer. Well, as with so much you hear about cancer if it can be caught early there's so much that can be done and people can go on and live a long and normal life.

But one of the cancers that may be discovered from an abnormal pap smear is cervical cancer, and then the question is, Well, what do you do about it. One option would be to have radiation. Another option would be to have a radical hysterectomy, and of course that's--you know, hysterectomy has traditionally been one of the most common if not the most common surgery, but it's a big deal. Well, what if you could do it where it wasn't such a big deal, where it's less time in the hospital, less trauma to the body, quicker recovery, less pain, less bleeding? Wouldn't that be good?

Well, have you heard about robotic surgery for gynecologic malignancies, gynecologic cancers? You may have heard about a robot being used, the da Vinci approach as it's called, for men with prostate cancer, but now at Northwestern it's really the first in Illinois to have a dedicated surgical robotics program for gynecologic malignancies. We're going to meet the doctor who's the director of the program in just a minute, but first since this is Patient Power let's meet a patient who has benefited. So joining us from just across the state line in Fontana, Wisconsin is Mary Beth Bromfield. Mary Beth is in real estate sales there in the Lake Geneva area. She's 64.

Mary Beth, it was back in October you did get one of those abnormal pap smear results, right?

Mary Beth:

Right, I did.

Andrew Schorr:

That's scary.

A CERVICAL CANCER DIAGNOSIS

Mary Beth:

It was scary. I probably had been lax in going--which I should mention--for pap smears, hadn't been in a while. And went for a pap smear, and when it came back showing that I had severe dysplasia I went on then eventually after going to a different doctor had a colon biopsy done, and it showed that I had cervical cancer. So it was very scary. I was pretty scared.

Andrew Schorr:

Right. Well, let's talk about that. Now, Mary Beth, in chatting with you on the phone yesterday and even before our program today, you are sort of a take-charge person, and I think as all of us as healthcare consumers today that is really important. That's why we call this program Patient Power. And so you started asking around about what were the options today for someone who was to have a cone biopsy, who was with a problem with potentially cervical cancer, and I know you have a son-in-law who has a sister who's actually in the medical field in Indianapolis. You were calling a doctor there, and you were checking with other people and you went to the doctor not too far away, and when you had the exam, the cone biopsy, what were the options that he presented to you?

Mary Beth:

The two options that he gave me, and he had even told me before going in for the outpatient procedure of a cone biopsy was that if it came back for cervical cancer that it would be an option of either radiation or a radical hysterectomy. So when the pathology report came back for the cervical cancer he gave me those options again but said that he did not do radical hysterectomies on women my age. He felt that it was too difficult and his recommendation would be to do the radiation.

Andrew Schorr:

Your age being 64. I'm 57, so you're an attractive older woman. 64 does not seem much older to me though, or maybe not even old today. And I know from the schedule you tell me you keep you're a pretty young 64 for sure.

Mary Beth:

Well, I kind of try to be, and I think I am. And that was one of the considerations that my son-in-law's sister had, I had gotten all the reports sent on to her because actually her expertise is in the in vitro fertilization but she is an ob/gyn, so she referred the reports on eventually to somebody else. But her concern was that at 64 I was a fairly young 64 and she thought surgery certainly should be considered as an option. She was thinking about some of the side effects you can have from radiation.

SURGERY AS A TREATMENT OPTION

Andrew Schorr:

All right. And let's take it a step further now. So in your family there is somebody who's known surgery well, your sister Judy, because I know she had been treated for breast cancer and had a mastectomy, and I think you told me she's had knee replacement surgery and colon surgery.

Mary Beth:

And open heart surgery.

Andrew Schorr:

Oh, my goodness. So Judy's been through it. So when you think about the effects of surgery you know, certainly, even though you were mentioning about the effects of radiation, that surgery can be a big deal. Judy had done some research for her husband on that da Vinci robotics approach for prostate cancer, and I think along the way your husband was diagnosed with prostate cancer, and you all were wondering whether it applied to him too. But all that was for men. What did those contacts back in Indianapolis and your son-in-law's sister, the doctor you consulted, what did they say about a robotic approach for you?

Mary Beth:

Actually when she referred to some friends of hers that were gynecological oncologists they suggested that I look into the robotic surgery, which she passed that information on to me. And their suggestion was since I lived fairly close to the Chicago, downtown Chicago area, within two hours, that I contact Dr. Lowe at Northwestern, that he was an expert with robotic surgery for gynecological reasons.

Andrew Schorr:

And you did, and let's tell everybody who your doctor became, and that's Dr. M. Patrick Lowe. Dr. Lowe is a relative newcomer to Northwestern. He was really brought there because of his expertise in robotics and gynecologic oncology, and he is the director of the Robotic and Minimally Invasive Surgical Program for the Division of Gynecologic Oncology at Northwestern University's Feinberg School of Medicine, which of course is renowned around the world.

Dr. Lowe, welcome. So here comes Mary Beth, a very proactive patients to see you. How did you describe the potential benefit to her of robotic surgery, and what would you say to our listeners as well, over what is traditional? Help us understand the differences. If somebody decides to have surgery for let's say cervical cancer and they're like an early stage patient like that, what was the traditional approach, a radical hysterectomy, what is the issues with that and then where do robotics come in? How is it different?

WHAT IS MINIMALLY INVASIVE SURGERY?

Dr. Lowe:

That's actually a very good question. Let me start out by giving a little bit of background on minimally invasive surgery in gynecologic oncology.

Andrew Schorr:

Sure.

Dr. Lowe:

Minimally invasive surgery is kind of like an umbrella term that encompasses not only robotics but also laparoscopy. So in GYN oncology and the late 80s and the early 90s in France specifically two physicians, Daniel Dargent and Denis Querleu, developed some laparoscopic techniques to do lymph node dissections in the pelvis. And this was pretty much a revolutionary type of technique that they described. And at that time laparoscopic equipment really is not where it is today as far as technology advances in optics and computer systems and things along those lines as well as fiber optics.

So what they determined was that the ability to do lymph node dissections laparoscopically they were getting the same number of lymph nodes dissecting in the same anatomical areas as they were in open procedures doing lymph node dissections. So this kind of really started people to think that, well, if you can do a lymph node dissection laparoscopically the same way that you can do an open surgery can you now consider doing cancer surgeries, so, in other words, hysterectomies. Adding a hysterectomy laparoscopically into a lymph node dissection rather than doing an open abdominal surgery. And so they expanded that application or the initial application of laparoscopy for lymph node dissections into performing hysterectomies and lymph node dissections primarily for endometrial cancers.

Then shortly thereafter another one of their colleagues in France, Camus, developed a technique and performed the first laparoscopic radical hysterectomy in the early 1990s. So this is a monumental leap in going from laparoscopy for lymph nodes, laparoscopy for a simple hysterectomy to laparoscopy for radical hysterectomy. Now, remember and keep this in mind that these were a small series of patients by a few of the world's experts who were performing these procedures, so it was not established that this would be something you could offer your patients routinely.

So what has happened since the early 90s, more and more physicians not only in France but also in Germany, the United States, the Far East, began adopting these techniques for applications in GYN malignancies, specifically uterine cancer as well as cervical cancer. However, this adoption was hampered by a steep learning curve associated with advanced laparoscopy and the lack of experts. Now, even as

recently as in 2002, there were only five or six fellowship programs in GYN oncology in the United States that thought their fellows laparoscopy.

Andrew Schorr:

Laparoscopy, we're not even talking about robotic surgery.

Dr. Lowe:

We're not even to robotics yet, and this is in 2002.

Andrew Schorr:

Hand-held laparoscopy, uh-huh.

THE EMERGENCE OF ROBOTIC SURGERY

Dr. Lowe:

Okay. So what has happened since 2002 until now was the emergence of robotic surgery in other specialties such as urology. I received training in advanced laparoscopy in my fellowship and upon completion of my fellowship. In 2005 the FDA approved the da Vinci surgical system for applications in gynecology. This approval was primarily based on some work byof Arnold Advincula at the University of Michigan in treating fibroids and performing myomectomies using the da Vinci surgical system. ~~Now, the da Vinci surgical system it appears may allow us as GYN oncologists to perform some of these more difficult surgeries and shortening that learning curve associated with minimally invasive surgery. because up until even around 2005 there was not widespread application of laparoscopy in GYN oncology.~~

Since 2005, ~~with the robotic or the da Vinci surgical system~~ what we've seen is an significant increase in the number of Gynecologic Oncologist physicians across the United States who are ~~were~~ using robotic applications to offer their patients surgeries for endometrial cancers as well as surgeries for cervical cancers. ~~And so when I see a patient coming in with, say, an early stage cervical cancer, an early stage endometrial cancer o~~One of the things we wanted to develop and establish here at Northwestern ~~when I came here for this program~~ with our robotics program was to ~~sort of~~ change the way we looked at patients and in that we should be thinking of a minimally invasive surgical approach first, ~~for patients~~, and then if they're not candidates ~~maybe~~ we ~~should consider~~ revert to the traditional approach surgery.

And so when I see patients I usually talk to the patient, perform a history and physical examination, review any imaging studies, pathology slides, and then get a sense of is this patient a candidate for robotics or minimally invasive surgery or is this patient better suited for an open abdominal surgery.

So when I saw Mary Beth in the office and had looked at the pathology results, performed a physical examination, there did not seem to be any contraindications

in offering her a robotic radical hysterectomy for her diagnosis of cervical cancer. But we always take it a step further and are always complete. What everyone should know is that radiation therapy for stage I cervical cancer has the same five-year survival as surgery, so you have to make patients aware that both of those options are equal. Okay. The side effects ~~are a little bit different~~ associated with surgery and the side effects ~~are a little bit different~~ associated with radiation therapy are very different.

Andrew Schorr:

You know what I think we'll do, Dr. Lowe, is why don't we, to give ourselves time to really go through the benefits of the robotic surgery versus the radical open surgery, we'll do that right after the break. What I want to do is also understand how sort of Mary Beth processed this as well. And she had her surgery just early in December at the new Prentice Women's Hospital, and we want to hear about how that went and how her recovery is going.

Also we invite our listeners since this is a live webcast to join the discussion and you can send us an e-mail. Just send it to this address: NMH, for Northwestern Memorial Hospital, nmh@patientpower.info. You can also give us a call, 1-877-711-5611. We'll be right back with more Patient Power sponsored by Northwestern Memorial Hospital.

MARY BETH'S RECOVERY

Andrew Schorr:

Welcome back to our live webcast discussing robotic surgery at Northwestern Memorial Hospital, a unique program designed to help women who have gynecologic malignancies, gynecologic cancer like uterine cancer or cervical cancer. We have with us the director of the program Dr. M. Patrick Lowe. He's a gynecologic oncologist. They have a wonderful program there. Maybe you heard the earlier program we did a few months ago with Dr. Julian Schink from that same program there, and that's a replay you can find in the Patient Power or HealthNet section of the nmh.org website. Please take a listen to that.

We have also one of Dr. Lowe's patients, Mary Beth Bromfield, who joins us from Fontana, Wisconsin. She's in real estate up there.

And Mary Beth, I want to check now. You had your robotic surgery for the stage I cervical cancer just early in December at the new hospital, right?

Mary Beth:

Right. I had it actually done on the 13th of December.

Andrew Schorr:

Okay. Now, how has the recovery been, because that's going to be part of the focus of our discussion with Dr. Lowe in a second. How is it going?

Mary Beth:

I think it's going well. I didn't feel as good the first week as kind of I thought I would, but I think it had a lot to do with that I'd never had surgery before, and I think I was a little stressed out about it. But then I talked to friends who had gone through regular hysterectomies, and they were amazed that I was up walking around, that I had all the kids here for Christmas, that I was doing as well as I was.

So I guess my expectations were probably that I was going to feel better than I did, but all of a sudden it seems like I turned the corner and started really, really feeling quite well. So I'm real pleased with it, really, really pleased.

Andrew Schorr:

I'm delighted to hear that, and I'm sure your doctor is too. Now, we'll learn more about how long you have to be in the hospital in you have the open abdominal procedure, but for you with the robotic procedure, how long were you in the hospital?

Mary Beth:

Well, I had the surgery done on Friday. I think the surgery probably started around eight, nine o'clock. I'm not positive about the exact time. And I think I was out of the hospital by one the next day.

Andrew Schorr:

Wow.

Mary Beth:

So by the time I was through with surgery and got back to the room at Prentice I think it was 6:30 at night, and Dr. Lowe came in the next morning around 11:30 and said, You're doing great and we're going to let you go home. And I was out there about one o'clock.

Andrew Schorr:

Wow. Wow. Now, Dr. Lowe, so here she stayed overnight, and we're three weeks or so later here in January, and I think you had told me the other day on the phone, Mary Beth, that you're doing some work now, not working full-time but you've gone back and done some work at the office, right?

Mary Beth:

Right. I started last week, I think on Thursday it was, just going in just for a couple hours a day. And I have to be honest, after working for a few hours a day and coming home, I'm a little fatigued, I'm a little tired. But this week now over the weekend I was actually showing property, not for a long period of time, for several hours. And then so far this week I've been in the office both days for probably an average of three hours. And then when I was at home I've been on the phone maybe talking with people or family, so I think I'm doing pretty good.

New Year's Eve we were able to go over to friends' that lived a block away. They had a whole group over, and I was over there for about three hours. And at that party actually I had two people that had had--not radical hysterectomies, because there's a difference between a radical hysterectomy and a complete hysterectomy. And they had it done when they were in their 40s, and they were amazed that I was up moving around within a couple of weeks and feeling as well as I did.

COMPARING TRADITIONAL SURGERY TO ROBOTIC SURGERY

Andrew Schorr:

Well, Dr. Lowe, let's compare that. So Mary Beth has talked about so she was in the hospital just overnight, and then she was able to do some work now two and a half, three weeks later, have kids over for Christmas dinner, go to a New Year's party. How would that compare if someone had had the radical hysterectomy through an open procedure?

Dr. Lowe:

Let me first off by saying Mary Beth's recovery is typical of almost every patient that has had this procedure at Northwestern. With the exception of ~~probably~~ one or two patients who have undergone robotic surgery ~~that we've performed the surgery on~~, all of the patients have gone home the next day after surgery, whether it was for cervical endometrial cancer, ~~or~~ uterine cancer, uterine fibroids, adnexal masses. ~~;~~ In addition, and most of them the patients have demonstrated the same quick type of recovery as that Mary Beth has. Typically, 80 to 85 percent recovered within one week. Within two weeks if they feel comfortable going back to work, it appears that has not been hampered by the fact they just had a hysterectomy. ~~Some~~ Several of our patients have ~~even~~ done that.

As comparing that to traditional surgery, you're looking at an average of three to five days in the hospital, and four to six weeks of recovery. Traditional surgery patients require more IV pain medication postoperative in the hospital and after discharge than our patients who have robotic surgery. And typically, postoperatively as comparing robotics to traditional surgery you typically receive more IV narcotic pain medication. The pain assessment scores scores are typically much, much higher with traditional surgery. In fact, some of our patients who have undergone robotic surgery on the first day after surgery postoperative day one from robotics were only using have used only Tylenol or Motrin rather than IV morphine. ~~They are going home a lot sooner.~~ Our robotic surgery patients go home the day after surgery and have a better quality of life in the first 4-6 weeks after surgery.

~~But~~ I think we as surgeons have come to recognize the importance of quality of life after surgery for women in this time and day. one of the really big, important things that I'd like to stress is the quality of life is dramatically different. And even this Quality of life outcomes has been evaluated studies in a randomized trial through the Gynecologic Oncology Group, and demonstrated that women who have minimally invasive surgery, ~~whether it's robotics or laparoscopy for their~~ for endometrial cancers have a dramatically improved quality of life right after surgery. So for women who have dual careers/lives, in other words women who are employed outside the home ones who have a job and also are responsible for child care/helping take care of children, recovery and quality of life that's become very important.

~~because~~ Historically with traditional surgery you're going to need some type of assistance, family help, for likely four to six weeks until you fully recover from surgery. That is not the case with robotic surgery.

The fatigue that Mary Beth is experiencing is not uncommon after any surgical procedure ~~experiencing, typically it- whether robotic or traditional.~~ It does not seem the fatigue associated with robotic surgery is similar to traditional surgery, ~~that that's changed because~~ but patients are still having major surgical procedures, and that recovery takes time ~~still is similar~~. However, changing the discharge date from three, possibly four ~~or to~~ five days to one day and so far having none of our robotic patients ~~have been~~ readmitted to the hospital after discharge really speaks about the difference between the two surgical approaches.

Andrew Schorr:

Let's mention a couple of others. I understand there can be less risk of infection and also less blood loss and maybe fewer transfusions.

Dr. Lowe:

Correct. Correct. From my collected series ~~Out~~ of all the robotic surgeries that I've performed elsewhere and at Northwestern ~~also the ones that we've performed here~~ we're looking at an average blood loss of around 75 to 100 ccs. The blood loss from Mary Beth's case was 75 ccs. An open radical hysterectomy, if you look in the literature, has a range of anywhere between 400- and 800 ccs of blood loss. In addition, no patient from our series so far has required a blood transfusion.

Andrew Schorr:

Wow.

Dr. Lowe:

So we're talking about minimal blood loss associated with radical pelvic surgeries. It's almost hard to believe.

Andrew Schorr:

Yeah, it is. And with any surgical procedure obviously there's always a worry about infection. And that risk is lowered too?

Dr. Lowe:

Correct. ~~It's—m~~ Most of the postoperative infections we see are typically surgical site infections or incisional site infections. ~~So—s~~ Since these incisions are much smaller than when there's less—you know, when you make a large incision for traditional laparotomy in the abdomen you are much less likely to alter the local blood supply to the skin. You also cause ~~less some~~ tissue necrosis in the subcutaneous tissue, so patients who have other comorbidities, such as hypertension, ~~and~~ diabetes, and obesity ~~those patients~~ are a high risk for wound infections postoperatively. And we're just not seeing that high infection rate with

~~incisions that are four or five, you know, the~~ one-centimeter incisions made in ~~someone's~~ patient's abdomen for robotic surgery.

We've had some patients come in and say, You know, one of my incisions doesn't look right. The skin is not exactly reapproximated back together. But we're not seeing patients get admitted to the hospital to get IV antibiotics, to have their wounds debrided and packed or receive getting home antibiotics for cellulitis cellulites, ~~those types of things with this type of surgery~~. So that's a really dramatic difference not only from a postoperative care standpoint but also

from an allocation of health resources. You know, if we're cutting down our infection rate with these types of procedures we're saving healthcare dollars in the long run, and that's very important.

Andrew Schorr:

So many people, because there's been a lot of advertising about it too. I've heard about the da Vinci robotic system used in prostate cancer, but many people before tonight have not really heard about it for women, for gynecologic cancers, and I know that's been one of your goals is let tell me know about it. Of course not that many places do it. Northwestern has been leading the way, but a woman should have this discussion with her doctor when they consider the options and now it's available in Illinois.

Dr. Lowe:

Right. And if you look at national statistics, you know, one of the things that we're still seeing around, 60 to 63 percent of hysterectomies are performed in the United States via a large incision in the abdomen. And you know less than maybe 10 to 12 , 13 percent of those hysterectomies are being performed laparoscopically, and the rest are being performed through a vaginal surgery, which is a form of minimally invasive surgery and it is a great surgery, and ~~it~~ has very low risk of complications as well.

What we want to do is change that 10 to 12 , 13 percent that are being laparoscopically and convert that to the 63 percent that are being performed abdominally , ~~whether it's— you know, one of a number of~~ There are many factors that seems to preclude patients being offered laparoscopy, hopefully with either a combination of laparoscopy and robotics or robotics and laparoscopy or just robotics by itself together introducing the that technology and decreasing the number of women having abdominal hysterectomies surgeries in the United States is very, very important.

~~Because this technology~~ Minimally invasive surgery has been around for 20 to 25 years, and all resident trainees s in OB-GYN and ~~now~~ more fellows in gynecologic oncology are being taught these techniques. We can and should do better. And one of the things that I would like to get across to patients from this program is to hat educate yourself when you have a diagnosis of a cancer or any gynecologic condition. It's always okay to get a second opinion, and if my patients want a second opinion I'm more than happy to obtain a second opinion for them. But really what the important thing is know what your surgical options are as a patient.

A lot of patients are not offered laparoscopy or robotics because their surgeon may not have been trained in laparoscopy or robotics. That doesn't mean you can't find a physician or a consult with another physician who does. You may be a candidate for it, you may be not. But it's really important as in everything in the world to

know what your options are. And when you're taking your healthcare into your own hands especially with a cancer diagnosis it's really important to know what's out there and what the facts are.

And to take that a little bit further, I would hope all women who are diagnosed with gynecologic cancers seek and find a consultation with a gynecologic oncologist. I think that's very important for them to get that knowledge. Gynecologic oncologists are experts in that field and we have the most knowledge about those conditions. Gynecological oncologists aren't in every city and town in the United States, but it's—I can't stress enough the importance of education, and if you feel like you need to get a second opinion it's certainly okay to do that.

Andrew Schorr:

Right. I agree completely.

We're going to take another short break, and when we come back we're going to get some consumer advice from Mary Beth about just what you were talking about. Because, Mary Beth, you'd been to see a doctor and you want to be respectful of him, but he had something that then other doctors were saying, I don't know about that and then you were finding out about other options including the robotic approach. Sometimes people don't want to upset the apple cart, but you do have to do what's best for you as you do your research. We'll be right back with more of our discussion on robotics for gynecologic cancer after these messages.

GETTING A SECOND OPINION

Andrew Schorr:

Okay. Let's plow ahead and learn more about robotic surgery. So, Mary Beth, you had it, and, you know, but you'd already been to see a gynecologic oncologist, but he had a different recommendation about the radiation. And you want to be respectful, but what would you say to women as they navigate this, maybe get a second opinion or third opinion. How can they do that in a way that they can feel good about but also feel good that if they need to go to another doctor, have a different approach that they've chosen, that, you know, that that's not stressful and they know they're getting the care that's right for them?

Mary Beth:

Well, I think you have to be proactive. You know, I truly liked the doctor that I went to. He was a terrific man. He was a little older, not as old as I am, but an older doctor, and when he wanted me to have the radiation instead of the surgery and I mentioned this to our relative and she suggested that I pursue other things she told me not to feel guilty. And I also have a daughter-in-law that used to be well, she still is a doctor but she doesn't practice anymore. She's got two small children. And she told me the same thing. She lives in Michigan. And she said, You have to be proactive. You shouldn't feel guilty about getting a second opinion.

No doctor should be upset that you want to get a second opinion. It's your life, it's your body and don't feel guilty about it.

So when I had the suggestion to check into robotic surgery I felt it was a good choice for me. And I didn't make the decision all on my own. I had made the appointment to go see Dr. Lowe, but after that I did include my other daughter-in-law and my daughter and my son and the other children that lived in Michigan and told them kind of what was going on and told them I had some decisions to make, that they were going to be my decisions but that I respected also their opinion.

So when I went to see Dr. Lowe I did bring my daughter and daughter-in-law and my husband, who was most important in this decision, and they listened to what Dr. Lowe had to say. And then after that appointment we did go back to my original doctor and discussed things too. He's a terrific man. I liked Dr. Weiss very, very much, but he didn't do the da Vinci surgery, and he really was not ungracious about me getting another opinion and looking into the da Vinci surgery.

I also went and actually talked to the radiology oncologist that he had recommended, and he also thought it was a good idea that I looked into the da Vinci surgery and do the surgery. So I got many opinions.

Andrew Schorr:
Right.

Mary Beth:
And I think you can tell by listening to Dr. Lowe how knowledgeable he is and what a terrific human being he is. It also helps that you really like who is taking care of you, who's doing your surgery and who you are entrusting your life to. I think if anybody goes to have something done to them and you don't like the doctor, switch. Go look for somebody that you feel that you can entrust your life to.

IS ROBOTIC SURGERY RIGHT FOR EVERYONE?

Andrew Schorr:
I'm going to put you in the Patient Power Hall of Fame because you are just so right on with the mission, the way we have to be as consumers.

Now, Dr. Lowe, we talked about the advantages of the surgery. Who is it not right for? And are there any concerns you'd like to bring up, as with any surgery, that people need to know about. Surgery is surgery, so help put it in perspective, the things you tell patients when they come to you and say, Gee, maybe robotic surgery. I've heard you do it. Somebody hears this webcast, and they're all excited about it. Is it right for everybody? And if they are going forward with it what do they need to know to consider as they move forward?

Dr. Lowe:

I think you're absolutely correct, Andrew, when you say "surgery is surgery," and that encompasses all aspects of surgery. The anatomy, the technique of the procedure itself as well as the complications. The types of complications of a minimally invasive surgery are the same, ~~typically,~~ as an open abdominal surgery. ~~with a few things—Postoperative infections and maybe a little bit of blood loss, but in general they're very similar.—Okay~~ However, the incidence of complications from a minimally invasive surgery appear to be less.

But what I evaluate for patients as far as candidates for robotic surgery is I look and see how many abdominal surgeries they have had before. I also look to see what type of medical problems they have. Do they have problems with COPD? Are they morbidly obese? Have they had, as an example, prior gastric bypass surgery? Do they have a healthy heart. Okay. Poorly controlled hypertension, poorly controlled diabetes. So we have to evaluate patients from a medical standpoint before we can proceed with a surgical standpoint.

Now, there are a few things as far as robotic surgery that limits patients as being candidates, and one of the first things that comes to mind is if someone has had prior upper abdominal surgeries, in other words, above their bellybutton, above their umbilicus, and there's noted to be adhesions there, with the way the robotic system is set up at least for gynecologic cancers that's where a lot of the instruments or the trocars go inside the abdominal cavity. So that precludes some patients from having the procedure because it increases the risk of getting an injury inserting the trocars. Other patients that have previously noted severe abdominal adhesions from previous surgeries, those patients may not be the best candidates because you're also increasing their risk.

As far as morbid obesity, we're sort of looking at robotics as maybe being possibly an ideal tool to treat patients who are morbidly obese, and just let me give you a few examples. Historically with laparoscopy patients who had a BMI of greater than 35 or, you know, a weight of around 225, 230 pounds, to do those surgeries laparoscopically was very difficult. We've operated on patients with the robotic surgical system who are obese. The ~~heaviest largest~~ patients that I've operated on weighed 340 pounds with endometrial cancer, and we were able to do the full staging procedures. I can't do that surgery laparoscopically and it is certainly difficult from a traditional approach as well. ~~—And that is also a difficult surgery to do open in patients that are that large.—~~ Those patients have gone home the next day, the same as all the other patients. Whether they're thin, obese, young, old, we're seeing a lot of the same outcomes with the robotic surgery.

But first and foremost you have to make sure that the patient is medically fit for surgery and that they have a healthy heart, healthy lungs, and they don't have anything inside their abdominal cavity as far as adhesions that are major concern

that will preclude you from being able to do it from a minimally invasive or robotic standpoint.

Andrew Schorr:

Dr. Lowe, let me just ask you this just so people visualize this, and I think you told me on YouTube you've got like a video about it, and we'll try to link to that. But you talked about these very small incisions, if you will. So, Mary Beth, you may not wear a bikini, any more but I imagine rather than a big scar you've got these little tiny little places as we know with laparoscopic surgery.

So what are you doing? You're not actually right next to the patient. You're at a console nearby and you're operating the robot and you have a camera that's inserted and little tools that actually are, what, these trocars, if you will, that go in and do the work?

HOW ROBOTIC SURGERY WORKS

Dr. Lowe:

Correct. But what you have is there's basically three components to the system. You have a vision system, which is three dimensional, and Northwestern actually purchased the high definition vision system, which basically for everybody that has a high definition television that is what the inside of the surgery looks like. And I always thought that the optical system with the standard da Vinci system was a dramatic leap over laparoscopy. With the high definition system it's truly mind-boggling about just how well you can see.

Now, in addition to the vision system which is connected to a camera you also have a patient side cart which contains the robotic arms and areas to connect the robotic instruments to the patient. So you can either have a ~~four- or five- arm- I'm sorry,~~ three- or four-arm robotic system. And it holds a variety of instruments including the camera to help you do the surgery.

Now, once you have the trocars inserted in the patient's abdomen and you've inserted the instruments, the patient side cart is connected to a surgeon's console, which is in the same room as the patient. From the surgeon's console is where you have hand controls that allow you to control the surgical instruments inside the patient. And so you're sitting down during the surgery, and you have basically a view finder that you look through, and it generates a three dimensional imagefield of the surgical and operative sites.

And it's really interesting because it sort of gives you a sense of immersion during the surgery. You're sort of like almost inside the patient doing the surgery because you can just see so phenomenally well. It's just really simply amazing the way the three components work together to allow you to do these complex procedures.

Andrew Schorr:

You're like flying a fighter in Star Wars or something like that it seems like.

Dr. Lowe:

Right.

Andrew Schorr:

Well, you must feel very gratified. I know it's really been as you've gone through your fellowship and all the years of training that you go through, you've been on the forefront of developing this for gynecologic cancers. It must be very gratifying to hear Mary Beth's story and then you've said so many of your patients have this quick recovery. And as you said you're able to use this approach on some people who just couldn't have the other procedures.

Dr. Lowe:

That is very true. And hearing those types of things reinforces why we come to work, why we take care of patients and is really the most important and I think the most precious aspect of taking care of cancer patients in that when they come back to see us in the office and we've performed a successful surgery and they've gotten good results from the surgery and their recovery has been dramatically improved through the technology that we're using, implementing and trying to push the envelope as far as taking care of patients with gynecologic cancers, utilizing robotics, you know, it is very gratifying to do what we do, and it's really an honor to do what we do. So I'm very proud of the things that we've been able to accomplish here so far in the short amount of time that I've been at Northwestern here.

Andrew Schorr:

And you've got a new hospital to go with it too. Prentice Women's Hospital.

Dr. Lowe:

It is a state of the art hospital for women. Um-mum.

SURGERY FOR OVARIAN CANCER?

Andrew Schorr:

Here's some e-mail questions we've been getting, and I want to fire some at you. So Jeri writes in from Chicago, "Why is robotic surgery not used for ovarian cancer?"

Dr. Lowe:

Well, ovarian cancer is typically and—it can not necessarily be isolated to the pelvis. And the way the robotic system works is it typically operates in one direction. And the way we've used it in gynecologic oncology is we operate towards the pelvis. Early stage cervical cancer, early stage uterine cancers typically limited to the pelvis when we do these surgeries. Sometimes we have surprises and it has spread



outside of the pelvis.

Ovarian cancer is a little bit different, and most of the studies that have been performed comparing laparoscopy to open surgery for ovarian cancer has shown that open surgery is superior ~~in that~~. And so we don't have any clear indications or applications of robotic surgery for ovarian cancer right now at this point in time.

SEX AFTER SURGERY

Andrew Schorr:

Here's another sort of \$64,000 question. You're 64 or 44 or 34, Lisa writes in "I'm preparing to have robotic surgery for a hysterectomy. How long will it be before I can resume sexual relations?"

Dr. Lowe:

~~It's going to be~~—I make the same recommendations as if we do an open surgery. The vaginal cuff when it is sutured back together at the completion of the case typically still requires the four to six weeks of time to heal ~~the surgical~~, and that doesn't necessarily change with robotics or laparoscopy or open surgery. That recovery time and those requirements are still the same ~~for of~~ avoiding intercourse initially after surgery.

Andrew Schorr:

All right. And then as you describe, so minimally invasive surgery is sort of a wider term.

Dr. Lowe:

Right.

Andrew Schorr:

And Sarah was Ann Arbor was asking about it. So that would be like the laparoscopic and maybe would include the robotic surgery. The da Vinci robotic approach is a subset of minimally invasive surgery.

Dr. Lowe:

That is correct.

FIBROID TUMORS

Andrew Schorr:

All right. I got it right.

Now, you mentioned along the way fibroids. Sharon from Westfield, Wisconsin wrote in. She said, "I'm 33 and my gynecologist discovered I have fibroid tumors." Which are nonmalignant, I guess.

Dr. Lowe:



Right.

Andrew Schorr:

"He doesn't perform robotic surgery and I'd like to explore my options. What's the best way to approach it both with my doctor and finding another doctor?"

I know we talked about that kind of getting second opinions but this same approach does apply to nonmalignant fibroids, right?

Dr. Lowe:

It does. It does. The best place to go if you do not have a surgeon in your area that performs robotics and you want to get some education on that and you want to get a consultation from someone who performs that, if you go to the Intuitive Surgical website, which is at www.intuitivesurgical.com, in the right lower quadrant of the webpage it has Locate a Surgeon. So if you click on Locate a Surgeon you then go to another page, and it has a couple of drop down boxes where you can select a specialty. And say if you want to look for gynecology in the state of Wisconsin--I'm actually doing this as we're talking--it basically will publish a list of surgeons who performed a specific number of cases utilizing robotic surgery in the state of Wisconsin. And so four names pop up. One is in Madison, Wisconsin. The other one is in West Alice, Wisconsin. There's another surgeon in Marshfield, Wisconsin, and then there's a fourth surgeon in Green Bay, Wisconsin. And so that's one of the easiest ways to find other surgeons.

Now, in talking to your surgeon in your home town about getting a second opinion I would have to say take Mary Beth's advice on that. It may be something that ultimately you decide not to do, but it's just one of those things I tell patients all the time: Knowledge is power. The more you understand about what we're treating you for the better off you're going to be, the better you're going to understand our recommendations. And even with surgery you'll have a better understanding of surgery.

I mean, you know, going back to the YouTube website where I have a page that if you just type in [mpatricklowemd](https://www.youtube.com/user/mpatricklowemd), there's six videos that I've made, four of which are robotic videos. And so when patients say, You know, this sounds great. You explained robotic surgery to me but I don't--I don't understand it. I say go to this webpage and watch the surgery. This will be similar to the surgery that you will have. Okay. If you have any other questions about the surgery while watching this write them down. Bring them back to me and we'll talk about it a little bit more. And almost every single patient--but I can think of one--said that it was very helpful and it was very beneficial. One patient actually said the camera angle was too close, too zoomed in for the videos, so they wanted a more panoramic view.

Andrew Schorr:

So they're a film producer.

SURGERY VIDEOS

Dr. Lowe:

Exactly. But other than that the response has been wonderful with the videos. And these are educational videos that we've posted for patients.

Andrew Schorr:

All right.

And by the way you spell Dr. Lowe's last name with an E at the end, l-o-w-e, so mpatricklowe, l-o-w-e. And then at YouTube, is that--you just search on YouTube.

Dr. Lowe:

You just go to YouTube and in the search window you just type in mpatricklowemd.

Andrew Schorr:

All right. There you go. Cool. We're in this whole computer age, robotics, video on YouTube, and then of course the leading edge at that new hospital at Northwestern. We'll be back with more of your questions and more Patient Power when we continue right after this.

Andrew Schorr:

I want to mention also as far as upcoming webcasts that in two weeks from tonight we'll have our interview with another expert from Northwestern Memorial. That's Dr. Gil Weiss. We're going to be talking about reproductive health. So if you are in the reproductive years I'm sure for women, but also we'll see if we'll take some questions for men too, but particularly for women your questions are welcome for Dr. Gil Weiss. You can send them in at any time. Just send us an e-mail to nmh@patientpower.info.

I want to go back to Mary Beth. So, Mary Beth, we talked about patient empowerment and getting the right information. So you hear about this whole robotic thing. When you first heard about it did you have any concerns? You know, sometimes new technology is great but sometimes you wonder whether it's too new for you. Did you go into it and feel very comfortable with it?

FAITH IN NEW TECHNIQUES

Mary Beth:

Actually, I really did. Maybe it's because my kids are into all the new technology and I didn't want them to think that I wasn't up on things. So that kind of had a little something to do with it. But I really believe that the young are the wave of the future. And it's not that the older doctors aren't great, they're wonderful, but they're not up on some of the new techniques. And I really wanted to really go to a younger doctor who was up on all the newest types of either surgery or care for my

disease and feel very lucky that I was able to contact Dr. Lowe, get in to see him and have him didn't the surgery. So no, I wasn't really nervous about the new technology. I was excited about that.

Andrew Schorr:

Right. And worth the drive. I know you had a new grandchild that was born at the Prentice Women's Hospital with your family in Chicago, but coming from Wisconsin it was worth the drive to get the benefit?

Mary Beth:

Oh, yes. We were originally kind of from the western suburban Chicago area, and my husband years ago had a cardio conversion done at Northwestern, so we respect the care that you get at Northwestern. We know it's a wonderful hospital. A lot of our friends here in Wisconsin drive into the city to their doctors still at Northwestern. My children, my daughter or son and daughter-in-law could not be happier with the care that they've gotten at Northwestern and with the two babies they've had at Northwestern. She was kind of high-risk, so Northwestern was a great choice for her.

TREATMENT FOR GYNECOLOGIC CANCERS

Andrew Schorr:

Well, I'm glad.

Now, I want to just get a little more information on the treatment of these cancers. Dr. Lowe, so you're a gynecologic oncologist, and you do the robotic surgery, but you're a gynecologic oncologist where there are other modalities that come into play. Now, we mentioned radiation, and the radiation oncologist does that. But sometimes there's chemotherapy as well. Do you coordinate that? And how do you know which comes first?

Dr. Lowe:

Well, for the subspecialty of GYN oncology it's a unique subspecialty in that you do your four years of medical school then you do a residency in obstetrics and gynecology, which is four years. Now, what you then have to do is to go into subspecialty training. Depending on where you do your training you may do three or an additional four years specifically in gynecologic oncology. And so that training encompasses the treatment and management of gynecologic malignancies, ovarian cancer, uterine cancer, cervical cancer, vulvar cancer, vaginal cancers, gestational trophoblastic disease. And during that training you get exposure to surgical techniques, management of chemotherapeutic techniques as well as some exposure to radiation even though you're not primarily manages radiation therapy. That's performed by the radiation oncologist.

So the specialty is a little unique in that we do manage our patients who receive chemotherapy. We recommend and treat them with chemotherapy for some of the diseases that we take care of. We manage the medical complications from the chemotherapy as well as the surgical complications. So that's a little bit unique in the cancer field in that we perform the surgeries but we also provide some additional adjuvant therapy such as chemotherapy through our clinics in the offices. So that's really what makes ~~us~~ a little Gynecologic Oncology unique as a subspecialty.

Andrew Schorr:

By the way, just along the way, here is an e-mail we just got in. I don't know the name, you're going to know there, Mary Beth. But we got an e-mail that says, "I am Mary Beth Bromfield's daughter that lives in Michigan. I was unable to be with her all of the time. I'm listening to your program right now, and I'd like to tell Dr. Lowe thank you for taking care of Mary Beth. I'm truly grateful for everything he has done."

So there you go. We've got a family affair here, Dr. Lowe.

Mary Beth, which daughter is that?

Mary Beth:

Well, I have a daughter and a daughter-in-law. I have a feeling it's probably Jen, my daughter-in-law who is a medical doctor. But it could be my lovely Betsy too. It's going to be one of the two girls.

Andrew Schorr:

Thank you for writing in.

Well, as we draw this to a close, Dr. Lowe, you talked about how you're gratified that you can be part of this progress in medicine. Mary Beth, I'm going to just go back to you. So what would you say, a woman's listening, maybe it's live now or maybe it's in the middle of the night in a replay, or they're reading the transcript in a week or so. They've been told they have cervical cancer, uterine cancer, that maybe they need surgery and they're just terrified. What would you tell them, whether it's to get to robotic surgery or just to kind of methodically get to where their options are?

Mary Beth:

First of all, don't be afraid because there's a lot of options out there. Whether it's robotic surgery or radiation, I think the medical care, if you search out the right place you're going to get wonderful care. Be proactive. Maybe don't take the first opinion. Have confidence in who you go to. I think that's really important. You want to feel safe with whoever is taking care of you, and I felt safe with Dr. Lowe.

Andrew Schorr:

Well said. And I know your fan club listening worldwide is now all applauding you. Mary Beth, thank you so much for being with us. I hope that the two hours you spent at the office the other day leads to a two-million-dollar sale.

Mary Beth:

Oh, I do too.

Andrew Schorr:

And that you have a successful 2008, okay? It sounds like you're getting your energy back. And if I'm looking for a house around Lake Geneva I'm going to come see you, okay?

Mary Beth:

Well, thank you Andrew. And it was wonderful meeting you even if it was not in person. You're a survivor for sure and a wonderful human being.

Andrew Schorr:

Well, thank you. And this is my pleasure to do these programs every two weeks. Dr. Lowe, I want to thank you for being with us and wish you all the best. You're a great new addition to Northwestern Memorial, and I'm sure you're now training fellows and others at the Feinberg School of Medicine, and then you're going to have these people go around the country and they say, My mentor was M. Patrick Lowe. But for patients today they can come see you. Thanks for being with us, sir.

Dr. Lowe:

Thank you very much. It was my pleasure. And I'll see you soon Mary Beth, okay?

Mary Beth:

I'll see you in a few weeks.

Andrew Schorr:

Well, there you go. And she'll have more energy then.

Well, all the best for a new year to all our listeners. Should you be diagnosed with one of these conditions, though, you can hear that you have options and robotic surgery may be one of them. Our thanks always. And remember knowledge, you certainly heard it tonight, can be the best medicine of all.

I'm signing off from where I am in Seattle but a great supporter of Northwestern. Have a great evening and we'll talk to you in two weeks. Bye-bye.

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