Mayo Clinic Q & A - Dr. Judy C. Boughey

SUMMARY KEYWORDS

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SPEAKERS

DeeDee Stiepan, Narrator, Dr. Judy Boughey

- Narrator 00:01
 Coming up on Mayo Clinic Q&A...
- Dr. Judy Boughey 00:03

A surgical resection of the tumor from the breast is used for the vast majority of patients with breast cancer. In particular those patients where the disease is limited to the breast or to the breast and the lymph nodes. One of the areas where often breast surgery does not have a role, is if breast cancer has spread or metastasized to other areas of the body. So for patients with stage four breast cancer, surgery has much more questionable

Narrator 00:27

After skin cancer, breast cancer is the most commonly diagnosed cancer in women in the United States. Treatment depends on the stage of the cancer and may consist of chemotherapy, radiation and surgery. As with all cancers, if diagnosed early, there's a better chance of successful treatment.

Dr. Judy Boughey 00:44

One of the key things with breast cancer treatment is that majority of our patients have a very good long-term survival. And so we do want to be considering not only what is the best treatment right now, but what is that patient really most comfortable with in 5, 10, 15 years' time.

DeeDee Stiepan 00:59

Welcome, everyone to Mayo Clinic Q&A. I'm Dee Dee Stiepan, sitting in for Dr. Halena Gazelka. Most people diagnosed with breast cancer undergo surgery to remove their cancer from the breast as part of their treatment as well as surgery on their lymph nodes. There's a wide range of operations used to treat breast cancer ranging from lumpectomy to mastectomy, and sentinel lymph node surgery to lymph node dissection. People who have a breast removed as part of treatment may also choose breast reconstruction surgery, a procedure to place a tissue expander or breast implant or to reconstruct the breast using a person's own tissue. Here with us to discuss how surgery is used in breast cancer treatment is Dr. Judy Boughey, a surgical oncologist at Mayo Clinic. Welcome to the program. Dr. Boughey, thanks so much for joining us.

- Dr. Judy Boughey 01:47
 Good morning DeeDee. It's a pleasure to be here today.
- DeeDee Stiepan 01:50
 So is surgery used to treat all forms of breast cancer?
- Dr. Judy Boughey 01:54

A great question. Surgical resection of the tumor from the breast and as you mentioned also, evaluation of the lymph nodes is used for the vast majority of patients with breast cancer. In particular, those patients where the disease is limited to the breast or to the breast and the lymph nodes. One of the areas where often breast surgery does not have a role is if the breast cancer has spread or metastasized to other areas of the body. So for patients with stage four breast cancer, surgery has a much more questionable role.

- DeeDee Stiepan 02:24
 What guides the type of surgery needed, you know, lumpectomy versus mastectomy, etc?
- Dr. Judy Boughey 02:31

That is kind of the crucial question that we spend a lot of time discussing with our patients. In general, for most patients, if they have a smaller tumor, they essentially have the choice between breast-conserving surgery, which is a lumpectomy and that's usually followed with radiation versus a mastectomy. Some of the things that could preclude the patient from being a candidate for either option would be if they have a much larger tumor size. And also we look at the ratio of the tumor size to the breast size. So for instance, a larger tumor and a small cup breast often would require a mastectomy, unless we treat it with medical therapy first. But for patients who have an appropriate tumor size to breast size ratio, they are frequently a candidate for either lumpectomy or mastectomy. And then that really comes down to a lot of discussion about the patient's personal preferences - would the patient prefer to try to keep the

breast, are they comfortable proceeding with radiation therapy? And then we talk about the process of a lumpectomy, resecting the tumor along with a rim of normal tissue around it, and then subsequent to surgery, the patient will have radiation therapy to the breast. Alternatively, some patients prefer a mastectomy. And then some patients even prefer a double mastectomy or mastectomy on both sides bilateral mastectomy. And some of that can be based on patient's preference is to avoid radiation, patients preference purely just that they feel more peace of mind with having the whole breast removed. And so it really becomes a patient and physician discussion and shared decision-making in terms of what will provide the best long-term outcome for these patients meeting their own personal preferences and goals. One of the key things with breast cancer treatment is that the majority of our patients have a very good long-term survival. And so we do want to be considering not only what is the best treatment right now, but what that patient will be the most comfortable with in 5 and 10 and 15 years' time.

DeeDee Stiepan 04:34

And I imagine a part of that discussion when deciding the type of surgery that's best for the patient is talking about the different risks. So what are the risks of breast cancer surgery?

Dr. Judy Boughey 04:44

Well generally in this grand scheme of things, breast surgery has fewer risks than many of the larger surgical interventions such as on your abdomen, colon surgery, pancreas surgery, lung surgery on your chest. So breast surgery has relatively lower risk profile than many surgeries. But in keeping with most surgeries, essentially, anytime you cut through the skin, there's a risk of bleeding. And particularly that usually, if it's going to happen, is going to happen within the first 24 hours after surgery, but it could happen at a later time point, less likely. And so one would be the risk of bleeding. The other main thing, again, common across all operations, would be a risk of infection. And this is particularly important for those patients that do have breast reconstruction and have a tissue expander and implant just because an infection around that foreign body sometimes may result in requiring to remove that implant or that expander. So we tend to be pretty active with trying to minimize risk of infection and trying to treat any infection early. And then the other main risk associated with breast surgery that is really associated with the surgery we do on the lymph nodes, is a risk of lymphedema. So the lymph nodes that we have underneath the armpit, drain both the fluid from the arm as well as from the breast. And so as part of breast surgery, we're tracking those lymphatics as they drain to the armpit, and usually you're removing a few lymph nodes or potentially the main group of lymph nodes underneath the arm. And one of the adverse side effects of that is that by removing those lymph nodes, it can cause some swelling of the arm on the side of the breast cancer.

DeeDee Stiepan 06:21

And how is it decided what type of lymph node surgery would be the best?

Dr. Judy Boughey 06:26

Another great question. Dee Dee. In terms of the appropriate lymph node surgery, that really

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very much depends on whether, prior to surgery, we know that the lymph nodes are involved with breast cancer, or whether it appears that those lymph nodes are not involved with breast cancer. Prior to surgery, most patients will have some breast imaging. Usually they'll have an ultrasound of the lymph nodes underneath the arm, and they may or may not have had a breast MRI that also sees the axillary lymph nodes. If we identify abnormal lymph nodes, usually those patients will have a needle biopsy of the lymph nodes to assess if there's cancer in the lymph node. If we know that there is cancer in the lymph node, then in some of those situations, that would lead us more to go into the total removal of all of the lymph nodes. If it looks like the lymph nodes, by the best of what we can see on imaging, are not involved with cancer, then we perform more of a staging procedure where we're just removing the first two or three lymph nodes in the drainage pathway, having them assessed by pathology. As long as there's no cancer in the lymph nodes, we can preserve the remaining lymph nodes. If we do find cancer in the lymph node, then we would go on and consider removing the additional lymph nodes or consider treating it with radiation therapy.

- DeeDee Stiepan 07:40
 - Okay, gotcha. What should a person look for in a breast cancer surgeon?
- Dr. Judy Boughey 07:46

That's a challenging question. You know, breast cancer is common and breast surgery is performed by a lot of specialist surgeons and a lot of general surgeons. And there are a lot of great places to get your breast surgery. I think as you're seeking out a breast surgeon, I think it's reasonable to ask them what proportion of their practice is breast cancer surgery, or how many of this type of operation do they perform on average in a year, and see whether they really have a true specialist interest in this disease and perform a high volume of breast surgery. More important than that, though, I think, is having a good relationship with your breast surgeon. So I think you really need to go sit down and visit with them, and see whether this is someone that you have a good relationship with, and that you would trust to perform your surgery. And if it doesn't click, then there are a lot of other surgeons available. And even here, within Mayo, we have a large group of surgeons and if the trust isn't there, then I always say happy to have you see one of my partners. We have a great group. So I think the most important thing, in my opinion, is if you're going to go to surgery, and you're going to go under the knife, you need to trust the team that you're working with.

- DeeDee Stiepan 08:52
 - Absolutely, that's great advice. How can someone prepare for breast cancer surgery?
- Dr. Judy Boughey 08:59

You know, starting on the breast cancer journey is always a very challenging time. And I think everybody handles this differently. I think this is a time where you need to lean on your loved ones and you yourself know who the best and the closest loved ones are that you want to let into your inner circle and into your inner group, and talk to them about your diagnosis and

about your treatment and your journey. I think one thing to be very aware of with breast cancer is that is a very common disease and every one of us has known someone or someone's relative that has been affected by this disease. Truthfully, breast cancer really is not one disease and so I would just caution against hearing about your friends and their experience because it may have been a different sized tumor and may have been treated a different way. And most importantly, it was likely a different tumor biology. Really, within breast cancer there are many different types depending on how aggressive the biology of the tumor is. And so you don't necessarily always have to listen to everybody's story and experience because that doesn't mean that yours will be the same. It's a little bit like when you first get pregnant and everyone tells you their pregnancy and their delivery pleasures and also some of their horrors. And so you do just have to listen to your friends, but also listen to your doctors and importantly, share with your doctors some of the concerns that you've heard from your friends, from your colleagues, what you've may have read on the internet, so that if they're not true, your team can dispel those myths for you and make you feel more comfortable.

- DeeDee Stiepan 10:30
 - Absolutely. And so you know, what does recovery look like from breast cancer surgery?
- Dr. Judy Boughey 10:37

Generally, recovery from breast cancer surgery is relatively straightforward. If the patient is having a lumpectomy with a sentinel lymph node surgery, that's a small incision on the breast a small incision underneath the armpit, everything is closed with dissolvable stitches. There's no drainage tube, it's an outpatient procedure. Hopefully you're home in your own surroundings that evening. And in general, it's kind of no heavy lifting for about a week or maybe 10 days, take it a little bit easy and then gradually get back to your usual activities of daily living. Obviously, mastectomy is a little bit more involved. With a mastectomy, whether without reconstruction, you're going to have a drainage tube on the one side. If you're doing both sides, you're going to have a drainage tube on each side. And for mastectomy, we recommend no heavy lifting for about four to six weeks. So you definitely do want to have a few meals precooked. And I usually say you know, no vacuuming, no snow blowing, no mowing the lawn. So taking a little bit easy, drainage tube will usually be in for around about a week to potentially two weeks. So a little bit longer kind of time of taking it easy. But again, most of these patients are able to be discharged from the hospital on the day of surgery. So they don't even need to spend the night in the hospital. They'll be back in their own home in their own surroundings with their loved ones. They'll be up they'll be walking, shower the day after surgery. So pretty smooth recovery. But obviously, there is some discomfort associated with the surgery. And of course it is a journey as we go through this whole process.

- DeeDee Stiepan 12:09
 - Absolutely. What are some, you know, obviously discomfort, but what are some other side effects that patients can expect from breast cancer surgery?
- Dr. Judy Boughey 12:18

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So we talked about obviously the post-operative pain and discomfort immediately associated with that. I think the other main thing to talk about would be numbness. Especially with a mastectomy, you lose a lot of the sensation, not only to the nipple areola if you are able to preserve a nipple areola, but also to the whole kind of chest wall. So it's like when you go to hug someone it just feels different because that whole chest wall sensation is different and you have a lot more numbness. And then kind of in keeping with that, I think it's also the just open discussion about sexual well-being and getting back to a normal sex life, whatever was normal for you prior to surgery and cancer diagnosis, trying to get you and your loved one back to that state after the breast cancer surgery because for mastectomy, definitely, and even with lumpectomy there's a scar on the breast, you know getting comfortable with your new normal.

DeeDee Stiepan 13:14

What should people consider in making a decision on where they should go for their breast cancer surgery?

Dr. Judy Boughey 13:23

Well, we touched on you know, feeling comfortable with your surgeon. For the vast majority of breast cancers, you really need to have a multidisciplinary team working with you. So you want to make sure you have a medical oncologist you met with, most likely, also a radiation oncologist as well as your breast surgeon. While it's nice if those can always be at one location, sometimes patients would travel for their surgery, but then choose to have their chemotherapy closer to home. And so definitely you want to seek out what's the most convenient for your lifestyle, in terms of work, family, and then getting the care and the place that you feel the most comfortable. In terms of lumpectomy, one of the benefits at the Mayo Clinic is we do have a very intensive review of pathology intraoperatively. So our pathology team actually look at the margins of a lumpectomy at the time of surgery. And so if there is any disease close to the edge or at the edge of a lumpectomy resection, we can actually, re-excise that edge, that margin during that initial operation. Whereas, if we only identified that on the final pathology, at other institutions, often, that may require a second operation. So if you are nearby, that's definitely why I think one of the advantages of the pathology support that we have at Mayo Clinic. And then, also in terms of those patients having reconstruction, you also want to make sure you have a good plastic surgeon, dedicated to breast reconstruction involved in your care.

DeeDee Stiepan 14:48

Absolutely. Finally, Dr. Boughey, is Mayo Clinic conducting any clinical trials related to breast cancer surgery?

Dr. Judy Boughey 14:55

Mayo Clinic is always doing a ton of clinical trials. In the breast cancer arena, a lot of our trials focus on the use of chemotherapy or medical therapy prior to surgery. This is definitely one of the ways forward in breast cancer treatment. So where historically, when I first started, the vast majority of patients had surgical resection first and then went on to medical therapy. Now,

probably about 25% of patients will have some form of therapy, be that chemotherapy or some kind of medication, that they take prior to the surgery with a view of shrinking the tumor. And so we have a lot of ongoing trials, trying to identify the best drugs to utilize in that setting. And obviously, for those patients not treated on trial, we still often treat them with standard chemotherapy prior to surgery. In the surgical aspect, one of the exciting trials that we're looking at is actually in those patients trying to prevent the development of breast cancer. So this is for patients who have a strong family history or are identified to have a genetic mutation that predisposes them to the development of breast cancer. And if those patients are interested in pursuing a bilateral risk-reducing mastectomy or a bilateral prophylactic mastectomy, we do a lot of bilateral nipple sparing mastectomy with immediate reconstruction. And one of the trials that we're very pleased to be one of only six centers in the U.S. offering is using the robots to perform the nipple sparing mastectomy. So it's a robotic assisted nipplesparing mastectomy. We have two surgeons in the room and the main advantage to the patient is it's a much smaller incision for performing the nipple-sparing mastectomy. So we're very excited to be able to offer that to our patients. At this time, it's only open to those patients that don't have breast cancer. But we do anticipate in the future year or two to have a trial and can also for those patients with breast cancer, if they're a candidate for nipple-sparing mastectomy.

- DeeDee Stiepan 16:43
 - Very fascinating stuff. Well, our thanks to Dr. Judy Boughey, a surgical oncologist at Mayo Clinic, for being with us today. Thanks for the great conversation, Dr. Boughey.
- Dr. Judy Boughey 16:52
 Pleasure, Dee Dee. Thanks so much.
- Narrator 16:54

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