

**KATHERINE**

This is 68-year-old female who has a 5-centimeter span of DCIS. We did a two-seed localization and ordered to bracket the area. The side that has cancer is actually larger than here contralateral side, which is lucky, so we're going to do an asymmetric donut reduction in order to give her symmetry and resect the cancer with clear margins. OK, can you give me really good tissue tension?

**KOPKASH:**

So we do markings beforehand in pre-op with the patient standing. We do some measurements as well. And that's what helps give us our optimal symmetry because once the patient's laying down in an operating room, things can become a little bit skewed. We talked about an oncoplastic reduction with this patient, but she wasn't interested in surgery on the other side. And therefore, our goal here is to just match her contralateral side.

OK, I'll take an [INAUDIBLE]. So we're just deepithelializing the area of skin. OK, so now, we're going to do a full-thickness incision in the quartile of the breast where we're removing the cancer.

Now, we are going to open up the upper-outer quadrant, which is where the cancer is located. We do this by dissecting between the subcutaneous tissue and the breast parenchyma. It's called the "anterior mammary fascia" is the plane we're dissecting on. And we set ourselves up for success here by having our assistant lift up and towards our face as opposed to directly towards the ceiling. And this helps us get in that correct plane.

Because of the radioactive seeds, we try to avoid suction unless it's absolutely necessary, because in theory, that could suck out the seed. I've never heard of it happening, but-- [INAUDIBLE]. So I'm looking at my imaging, making sure I'm happy with my depth and trying to make that two-dimensional image into a three-dimensional image in my brain.

OK, I'll take the probe. We can get the lighted retractor ready. So our constantly switching between our probe and our Bovie in order to make sure we know exactly where the bracketed cancer is located. [INAUDIBLE]

[WHIRRING]

Good. So I know where our first seed is right now, in terms of our plane of dissection. And now, we're just following the segment towards the localization of the second seed. Good. We're going to switch to the lighted retractor.

So it's a lighted, non-conducting retractor, which helps us with visualization, and it also helps protect our tissue from injury from the Bovie. And then I'm going to take a seed. OK, I'll have you hold this. So we can actually drop the table a little bit. Good. [INAUDIBLE] lifting up like this.

So we're opening that oncoplastic plane along this entire quadrant. Probe. OK, can I have just a marking stitch, like a silk?

[WHIRRING]

I think we're OK. When I'm mapping out the seeds in the patient, I sometimes place a stitch so I have an external reference point for where the seed is localized when we're removing a larger segment like this. I'm going to give you this back. [INAUDIBLE] second.

So once I've opened up that anterior part of the dissection, I start removing my cube. I usually go to the farthest part away from me, which, in her, would be superior. And then I work medial and lateral, then coming posterior, and then finally, the aspect closest to me, which, in her case, would be inferior.

And these types of cases are such a collaboration with surgery breast imaging because we have to have accurate localization in order to have intraoperative success.

[WHIRRING]

OK. Now I'm going to orient our specimen.

[WHIRRING]

OK, so I confirmed that there is seed uptake only in the specimen and none in the breast. Let me cut these.

OK, I'm going to give you left-breast seed-localized segmental mastectomy, short, superior, long, lateral, ink, anterior. And then we're going to do shade margins. So we'll give you all of them-- anterior, posterior, superior, inferior, medial, lateral. So this is going to get imaged to make sure that we have the entire abnormality, and then that'll get sent down to pathology fresh.

Going to take that one out and put it on a hemostat or whatever. Anterior, posterior, superior, inferior, medial, and lateral-- OK. I can give you this.

So we have imaging in the operating room, so in real time, we're able to see our specimen and make sure we've resected what we needed to take out. And I do standard six-edge shade margins, which is shown to decrease the positive-margin rate.

So in the country, the average re-excision rate's about 20%. In my practice, it's 3.5%. So I do think it definitely helps decrease re-excisions. So we see our two radioactive seeds, or biopsy clip, and our span of calcifications nicely in the middle.

I see really nice, clear tissue around it. We still are going to take additional shade margins because we do know that cancer is not always seen on imaging, and this helps decrease that chance of a microscopic-positive margin.

OK, I'll take an Alice. And then for closing everything, we'll need a 20 VICRYL, 30 VICRYL, 40 monocryl, and a GORE-TEX. And I'll do this. And it's going to be ink marks true for each margin. Come over here? Yep.

So this type of procedure is a level-I oncological procedure. So my fellowship was an oncoplastics at the University Southern California. So in addition to my clinical work here at NorthShore and being a clinical associate professor at the University of Chicago, I also am on the oncoplastics committee for the American Society of Breast Surgeons, and I teach the oncoplastics course for both the American College of Surgeons and the American Society of Breast Surgeons.

And this type of approach really just helps maximize our cosmetic outcome and successfully treat their cancer. We always clip our cavity with three to five clips. This is so radiation knows where the cancer was located. Especially because we're closing everything with tissue-advancement flaps, we have to show them where the tumor was located so they're able to give the boost, if necessary, to that area.

**FEMALE** There's two seeds [INAUDIBLE]?

**SPEAKER:**

**KATHERINE** Correct, Yeah. So do you guys have to do a double sticker or something?

**KOPKASH:**

**FEMALE** Yeah. [INAUDIBLE] Thank you.

**SPEAKER:**

**KATHERINE** Yeah. Thank you.

**KOPKASH:**

**FEMALE** After [INAUDIBLE].

**SPEAKER:**

**KATHERINE** OK, that's good. yeah, I usually just do like three, four, or five-- somewhere between there. OK. And then we'll  
**KOPKASH:** take the 20 VICRYL. Let me see where we're at here. OK. OK.

So I'm going to free up a little more tissue-- bar-tissue advancement flap. This is when we bring both sides of the breast parenchyma together to get rid of that divot that's in the center.

I'm going to have you kind of hold like this. Can I have a Martin forceps?

**FEMALE** [INAUDIBLE] or something like that?

**SPEAKER:**

**FEMALE** [INAUDIBLE]

**SPEAKER:**

**KATHERINE** [INAUDIBLE]

**KOPKASH:**

**FEMALE** Thank you. OK I'll take a marking pen. Thanks.

**SPEAKER:**

**FEMALE** [INAUDIBLE]

**SPEAKER:**

**KATHERINE** I am OK. And then we will take the GORE-TEX. So we're just reapproximating the nipple and the areolar skin.

**KOPKASH:** There's usually a little pleating when we do this, and that settles out within a few weeks. And definitely after radiation, you can't tell. Good. Give you this. Thanks.

So we're just matching this areola to the size on the other areola now.

**FEMALE** [INAUDIBLE]

**SPEAKER:**

**KATHERINE**

We can see the left side's still about 10% larger. And then that's the idea because the radiation is going to cause

**KOPKASH:**

some fibrosis on that side, which is definitely much more symmetric. And we're able to get out 6 centimeters of DCIS.