

**KATHERINE** So this is a 73-year-old female with a one centimeter invasive ductal carcinoma. So we're going to hide our scar.  
**KOPKASH:** We're going to do a hidden scar. We also call it aesthetic scar approach. At the edge of the areola, take out the tumor, bring the tissue together, and then check her lymph node through a hidden scar in her axilla. Good.

[INAUDIBLE] and there's evidence of that.

And because she's over 70, after surgery with the new guidelines, we may even safely be able to omit radiation therapy. There we go. She's estrogen receptor positive for tumors so most likely she'll take endocrine therapy in the future. Kind of like this. Kind of like this. I'll take the probe. Thanks. So because we can't feel this lesion, we had to mark it before surgery using a radioactive seed. That was done in breast imaging yesterday. This probe then picks up that radioactive isotope and helps lead us to the exact location of the cancer.

So I'm opening up that anterior mammary fascia. It's also called the oncoplastic plane. That's where the subcutaneous tissue and the breast parenchyma intercept. So I always think of my resection as a cube. So our anterior dissection is done. Now we're working out the inferior. Then we'll go medialateral, posterior, and finally superior. Thank you. Really gentle retraction here to just kind of help me see. Thank you.

OK. [INAUDIBLE] sterile [INAUDIBLE] probe. OK. We're going to orient our specimen. I'll take the marking stitch. I'm going to give you this back. I'll switch you. Thank you.

**FEMALE**  
**SPEAKER:**

The shorter one.

**KATHERINE** This'll be short right here. This is going to be left breast, C-localized, segmental mastectomy, short superior, long lateral, ink anterior. And then we're going to give you margins. So this will get imaged and then sent fresh to pathology. So we're taking our shaved margins here. OK. I'll take a marking pen. OK. We can see on our specimen imaging, we have the biopsy clip, the tumor, and the radioactive seed. So we'll send that down to pathology. And this is definitely a lot less surgery than what our previous patient had.

So this is a patient who's older, has more comorbidities. But even simple things like putting the incision in a cosmetically pleasing place and closing the tissue around where the tumor was resected, will significantly improve the cosmetic outcome. So I really think every patient can be an oncoplastic patient.

OK. Can I have those little marking clips? So now we're clipping the cavity so radiation knows where to deliver a booster that's required. And also so imaging knows where the cancer was resected from.

OK. I'll take a little irrigation.

A little more irrigation. [INAUDIBLE]. OK. I'll take some local. Hang on one sec. So we're injecting some local pain medication to help with post-operative pain control. In general our patients don't even require narcotics after these type of surgeries. And most go back to work within less than a week. And ice is really amazing. So like 30 minutes on, 30 minutes off. They all do for the 24 hours after surgery. And it's hard to have an ice pack on the rest if you're at work.

So we put them-- yeah. We put them in a wrap here in the operating room. And then 48 hours later they switch to a compression sports bra and take a shower and things. OK. I'll suture the [INAUDIBLE]. Can you get that off the skin, please?

**FEMALE  
SPEAKER:** Put that in the whole [INAUDIBLE].

**KATHERINE  
KOPKASH:** So we made an incision in the axillary fold. We're dissecting her subcutaneous tissue. Down in clavipectoral fascia. Once we come through the clavipectoral fascia we're in the axilla, and that's where the sentinel lymph node will be located.

OK. We'll have two [INAUDIBLE]. You can relax, Jenny. Thank you. Counts 14. Left axillary sentinel lymph node number one. Fresh. Nothing left in here. The background is zero. We'll take a little local. Here's the probe down. OK.

**FEMALE  
SPEAKER:** That count as zero?

**KATHERINE  
KOPKASH:** Yeah there's nothing. And then we'll need probably two 3-0's, two 4-0 monocryls.

So back 20, 30 years ago, anytime somebody had breast cancer, they did what's called an axillary dissection. They removed all the lymph nodes under the arm. Invasive breast cancer. I'll give you this back. Starting back in the 90s, they realized if you move the first lymph node that drains the breast, it reliably drains to a first node. And how we find that is this radioactive isotope. It's called technetium-99. The patient's injected within 24 hours of surgery and it's going to drain from the breast the same way a cancer would.

**FEMALE  
SPEAKER:** [INAUDIBLE]

**KATHERINE  
KOPKASH:** Usually periareolar.

**FEMALE  
SPEAKER:** OK.

**KATHERINE  
KOPKASH:** And it's done through nuclear medicine. And then that probe that picks up the radioactive seed also can be switched to pick up the technetium.

**FEMALE** What is the [INAUDIBLE]?

**SPEAKER:**

**KATHERINE** Just imaging guidance. So it's either stereo guidance or ultrasound guidance or sometimes even MRI guidance.

**KOPKASH:** OK, we'll take a 30. And they numb up the skin, make a tiny skin nick, and then place the seed. Thanks, and then scissors to Jenny. Thank you, Alex.

**FEMALE** Thank you, ma'am.

**SPEAKER:**

**KATHERINE** So we're closing this lymph node incision. You can see it hides nicely in this fold in the armpit. We did a left seed

**KOPKASH:** loci segmental mastectomy sentinel lymph node biopsy. There is 1, 7, 8 specimens. Clean case, no foreign body, no need for further antibiotics. You can go wherever anesthesia you would like. She can be ice pack and an Ultram or Tylenol, Advil.

So we're all done. Surgery took about 51 minutes. We got the cancer out, checked the lymph node. And with just some basic oncoplastic approaches hopefully she'll be really happy with her cosmetic appearance afterwards.