

BroadcastMed | Tissue Testing During Breast Cancer Lumpectomies Prevents Need for Reoperation 96 Percent of Time

SPEAKER: So the goal is always to achieve negative margins when you perform a lumpectomy. And ideally, we'd like to achieve that on 100% of our patients each and every day. Unfortunately, nationally, across the country, it's been widely established that the need for a second operation to re-excite a margin happens about 15 to up to 50, or even more percent of the time. So it's not uncommon for a breast cancer patient have to go back for a second operation to re-excite a margin.

So in this study, we looked at the rates of reoperation and compared that from patients treated here at the Mayo Clinic with the national data set, which is available through the American College of Surgeons NSQIP program, which stands for the National Quality Surgical Improvement Project program. This is a program where many large centers across the country participate, and they track, not all cases performed at those centers, but a significant proportion of cases, and they look at reoperation rates, among many other quality factors.

Specifically, here the Mayo Clinic in Rochester, we have a unique opportunity in terms of care of our patients because our pathologists perform an intense evaluation of the margins of the lumpectomy cavity from the time of surgical resection. This provides us with a very low rate of having to reoperate in order to achieve negative margins for breast cancer surgery.

So knowing that that is our practice here at Mayo, we studied and compared the rates here at the Mayo Clinic Rochester with the national data set in the ACS NSQIP data set. What we found was that, in average, the reoperation rate in the national dataset was 13.2%, whereas the data in the Mayo Clinic Rochester data set was 3.6%. And so this was significantly lower, and in many ways, was what we were anticipating to find.

Since the frozen section is really specific for looking at reoperations for lumpectomy for cancer, we did a comparison also to look at lumpectomies performed for benign indications, and also mastectomies, where margin control is less of an issue. And we saw that our rates were not significantly different between that seen at Mayo Clinic Rochester and that in the national data set. So this was kind of a control comparison to make sure that the difference was likely due to the oncological control of the operation, since the ACS NSQIP data really just looks at reoperation, which also could include things such as hematoma, placement of a portacath, additional operations that a cancer patient may require in the 30 days after their procedure.

This intense pathological evaluation with the use of frozen section of the margins while the patient is asleep really drops down that re-excision rate. So here at Mayo Clinic Rochester, we're actually only taking back around 3% to 5% of our patients for real excision of positive margins, and not the 15% to 50% that can be seen at other places. So being able to achieve negative margins at one operation has a huge impact, not only on the patient's satisfaction, but also in terms of time away from work, time traveling back and forth to hospital appointments.

And then also, just the financial cost, both to the patient, the insurance company, and the hospital, for a second operation because each second operation has another anesthetic cost, another surgeon cost, time away from the family and work. And the recovery from a second operation and the second anesthetic. So on many levels, this is a cost saving, both for the patient, for the hospital, and both for society.