

## Peer Review File

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### Reviewer A:

Summary: This study evaluates a cohort of patients scheduled to undergo breast surgery at an academic institution in New York City between March 23 - April 21, 2020. It includes patients scheduled for lumpectomy, mastectomy, and reconstruction. The author describes multiple methods of resource preservation including same day discharge, the transition from wire localization to radar probe localization, and delay of surgery. Of the patients originally scheduled for surgery during this time, only 34.8% were performed. The remainder of patient's either had their surgery postponed or received a form of neoadjuvant therapy to bridge to surgery, depending on their oncologic characteristics. All surgeries were successful with a 0% readmission rate.

### Major Comments:

1. On page 5 lines 8-11 and page 6 lines 8-10, the author discusses the use of radar probe localization in place of wire localization.

○ It would be helpful to clarify the effectiveness of these two methods. Are they equally effective, allowing them to be exchanged? Or is there a difference in cancer identification, cost, or other?

We have now clarified in the discussion that there is no known difference in efficacy of either localization technique (PMID 27469121, 32989660).

■ If they are not truly equal in all ways, what tradeoffs did your institution accept in order to avoid coordinate surgical and radiology schedules?

To our knowledge there is no difference in efficacy, although there have not been robust randomized clinical trials to evaluate this question.

2. On page 6 lines 10-11 the author describes mastectomy and reconstruction being offered as an outpatient procedure for four of the patients.

○ Was the decision for same day surgery made preoperatively based on selection criteria or postoperatively based on patient recovery speed?

This decision was made preoperatively, and then again re-evaluated and confirmed in the post-operative setting.

○ What steps were taken to prepare the patient for same day discharge? Total IV anesthesia? Avoidance of IV drugs postoperatively?

Preop optimization with Tylenol/ +/- Gabapentin/ +/- intraoperative subpectoral block (by one of the surgeons) helped with post-op pain control. Above all else, patient motivation to go home during the pandemic surge made same day d/c possible

3. Furthermore, for the patients who were discharged same day - what is your institution's normal length of stay/discharge protocol? Is outpatient mastectomy/reconstruction a sustainable method of resource preservation going forward given your teams positive readmission results?

Our institutional policy has been to discharge lumpectomies/needle-localization lumpectomies in the outpatient setting (regardless of sentinel lymph node sampling). Patients undergoing mastectomy both with and without reconstruction have generally been admitted overnight though patients may have been discharged same day on a case-by-case basis (i.e. simple mastectomy without reconstruction in a motivated patient). During the current academic year, we have continued to implement same-day discharge policies for most of our cases (lumpectomies, mastectomy +/- TE/implant reconstruction) barring complications or patient preference/logistical barriers to discharge. Though we have not performed an official analysis, anecdotally we have seen similarly positive re-admission results and low inpatient admission numbers.

Minor Comments:

1. In the results section the author states that only four out of six mastectomies received reconstruction. Were all patients offered reconstruction and only four elected for it? Or did the COVID-19 setting affect the availability of reconstruction to patients?

All patients were offered reconstruction, however, during the peak of the COVID-19 pandemic reconstruction was offered as a staged procedure for some patients. It is unclear how the COVID-19 pandemic impacted patient decision making in this regard and we did not evaluate patient decision making in this analysis.

2. In the conclusion, the author states that it is unclear when the pandemic will come to an end - it would be great to elaborate here on whether these methods of resource preservation (same day discharge, radar probe localization, etc.) are sustainable and effective long term should the pandemic persist?

We have now updated the conclusion.

a. Furthermore, are these methods of resource preservation good alternatives outside of the pandemic setting to minimize cost and use of staff?

The long-term efficacy and outcomes associated with resource preservation including potential for cost savings should be prospectively evaluated to help understand their value beyond the pandemic setting. The goal of this manuscript was to convey our experience as it may be helpful to others.

**Reviewer B:** Interesting article, with good learning value for other breast and oncology surgeons worldwide.

Just a few comments to clarify a few points which I found confusing, and which I think can help add more clarity on the topic.

1) It is not clear to me - for the patients who had reconstruction: what reconstruction was performed? Was there a shift from free flaps to implants or perhaps tissue expanders with the view of a delayed reconstruction? presumably since they were discharged the same day, were they implants?

All reconstruction was performed with tissue expanders or implants. There were no autologous reconstructions performed as these procedures were too resource intensive.

2) This leads to the next point about the rest of those who underwent surgery, were they also day cases (and discharged the same day)? Mastectomy with recon is the most 'major ' of all the surgeries and were sent home the same day. Or is it your usual practice to send home patients with mastectomies and lumpectomies the same day. Will be good to clarify this in your discussion.

We have now clarified this in our discussion.

3) The 2 patients who were planned for bilateral mastectomies with recon ended up a lumpectomy + SLNB (so it was a unilateral cancer and the other side was prophylactic?)

Yes, we have now clarified this in the results section.

4) Why was surgery for one patient with DCIS performed, given that it is not urgent, compared to the rest of the invasive cancers of higher stage?

No specific reason was documented in the medical record, it is possible that a cancellation occurred which opened up a spot for this patient to receive surgery earlier. Alternatively, this patient may have had other barriers to receiving care in the future which necessitated her procedure earlier.

5) What is the overall delay time for patients who had their surgeries postponed?

In this analysis, we did not evaluate the median delay of postponed surgeries. However, in a separate analysis related to the overall breast cancer care delay impact of the COVID-19 pandemic we found that the median surgery delays were 47 days (range 8-97 days). (Tejus S, et al. ASCO Quality Symposium 2020; Tejus S, et al. Journal of Oncology Practice [In Press]).

6) How did you team risk stratify or triage your patients to determine urgency of surgery? This will be a useful guide for the rest of us.

Patients were risk stratified using published guidelines, hospital policy, and the patient/surgeon availability on a case by case basis. These details were moved from the introduction to the methods section to enhance clarity.

7) Of those delay, a number of them had neoadjuvant chemotherapy. So what is being done for them in the interim given that their neoadjuvant chemo had presumably been completed?

This was addressed on a case by case base depending on the details of their therapy and the duration of their surgical delay.

8) It is now 3-4 months since your period of study. How are the patients whose surgeries you have postponed? Have they been operated on yet? Has their disease progressed much?

We have not evaluated the long-term outcomes of these patients.

9) Noticed that a number of surgeries have also been converted to lumpectomies. How then does this reconcile with the need and balance for adjuvant radiotherapy (and hence presumably many more visits to the hospital for RT).

This was reconciled on a case by case basis, some patients went on to have mastectomies and did not require radiation; while others decided to not have a mastectomy and received adjuvant radiation. Receipt of adjuvant therapy was not evaluated in this analysis.

10) Of the 28 who had surgery postponed, 6 started neoadjuvant therapy as a bridging. How about the other 22?

The other 22 did not initiate neoadjuvant or presurgical therapy as a bridge.

11) Interesting choice to change type of localisation for wide excision, but I find this paragraph and table a bit confusing.

We have now clarified the paragraph regarding localization in the results section and the in the

"In total, 25 patients had a localization procedure planned either for the primary breast lesion or a regional lymph node. Of the 17 patients who had localization, the planned method differed from the actual method in 7 (42%) patients. Initially, 16 of 25 patients were scheduled for a wire localization, but only 2 received wire localization and 7 were switched to radar device localization."

(contralateral side was prophylactic)

Numbers don't add up. So what happened to the remaining 16 (25-9) pts? surgery postponed or no localisation used?

25 patients were planned to have localization and 17 actually had localization. This included 6 patients who had radar probes placed who did not have surgery. Of the patients who had surgery, 11 were planned to have localization and 11 received localization, however 3 patients who had surgery who were planned to have wire localization were converted to radar probe localization. These numbers are displayed in the table which has now been clarified.

Table for this section also a bit confusing.

We have edited the table for clarity.

12) Also - what tracer do you use for sentinel lymph node biopsy? if radiocolloid, any change in protocol (1day or 2 day) to minimise coordination with nuclear medicine and surgeries? or is it administered by the surgeons? Or blue dye or sentimag?

Sentinel node mapping was done with radiocolloid on the day before or the day of depending on convenience to patient/ coordination. Some surgeons also used blue dye (lymphazurin).