Same-Day Discharge for Mastectomy Patients With and Without Immediate Reconstruction During the COVID-19 Pandemic

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Introduction

Disruptions to normal perioperative procedures during the SARS CoV-2 pandemic included limiting personnel available for in-hospital rounding and changes to overnight guest policies. Some patients expressed concern about iatrogenic exposure. Our surgical practice, comprised of two breast surgical oncology faculty members and two breast surgical oncology physician assistants, is located at an academic practice in suburban Houston TX. All operations take place in our Texas Medical Center campus in downtown Houston. This group practice also includes cancer pain medicine faculty and an oncologic social work team. We present our group's perioperative innovative clinical pathways for same-day discharge of patients undergoing mastectomy.

Methods

Between March 2020 and June 2022, both surgical teams discharged a total of 29 patients on the same say after mastectomy (14 patients from Team A and 15 patients from Team B). . Patient domiciles (or hotels, for out of state patients) were calculated in distance (miles) from the Texas Medical Center.

Two patients with chronic pain syndrome were referred pre-operatively to the pain team. Our cancer pain specialist employed a pre-operative medication regimen as follows:

- Celebrex 200mg BID for three days starting on the morning of surgery, then BID PRN
- Acetaminophen 1gm TID for three days starting on the morning of surgery, then TID PRN
- Gabapentin 300mg qHS gradually increasing to TID prior to surgery
- Individually-tailored plan for oral narcotics to be managed by cancer pain team
- Coordination of care with prescriptions filled pre-operatively

No patients received a paravertebral block the day of surgery. Exparel was used based on plastic surgeon preference; neither breast surgeon used Exparel for any cases performed without plastic surgery. In cases without Exparel, Team A used local anesthesia (1% lidocaine mixed 1:1 with 0.25% Marcaine) for all cases; Team B did not use local anesthesia.

Results

No exclusions were made based on age, BMI, comorbidities, or distance from home. Two patients had cardiac conditions which required anticoagulation other than aspirin, resumed at 48 hrs post-operatively. There were no exclusions based on procedure type. Patients underwent total mastectomy without reconstruction, total mastectomy with contralateral mastopexy, skin-sparing mastectomy with tissue expander, nipple-sparing mastectomy with tissue expander, and skin-sparing mastectomy with direct-to-implant placement. Patients having axillary surgery either had sentinel lymphadenectomy or axillary lymph node dissection. All patients received subcutaneous drains.

No patients experienced acute surgical issues in the first twenty-four hours after discharge and no patients required care before their scheduled post-operative visits.

Results

Table 1: Patient Demographics and Case Details	N=29
Age (Years)	Range: 26 to 91, Average: 57.2
Distance (Miles)	
Range	10-111
<25 miles	48% (N=14)
>25 miles	52% (N=15)
BMI	
Normal	21% (N=6)
Overweight	24% (N=7)
Class I obesity	38% (N=11)
Class II obesity	14% (N=4)
Class III obesity	3% (N=1)
Type of Mastectomy	
Unilateral or bilateral total without reconstruction	N=17
Unilateral or bilateral skin-sparing with tissue expander	N=9
Unilateral or bilateral nipple-sparing with tissue expander	N=1
Unilateral or bilateral mastectomy with direct implant	N=1
Unilateral mastectomy with contralateral mastopexy	N=1
Axillary Operation	
None indicated	N=10
Sentinel lymph node biopsy	N=18
Axillary lymph node dissection	N=1
Targeted axillary dissection	N=0
Indication for Operation	
Extent of disease	N=16
Early-stage disease but patient chose mastectomy	N=2
Risk reduction/prophylaxis	N=4
Gynecomastia	N=1
IBTR (In-breast tumor recurrence)	N=4
Second primary with history of contralateral mastectomy	N=2

Conclusions

The changes imposed by COVID-19 afforded our breast surgical oncology service the opportunity to innovate the perioperative process for post-mastectomy care in patients with and without reconstruction. Twenty-nine patients with a range of ages, BMI, co-morbidities, reconstructive plans, use of intraoperative analgesia, and distance from the hospital were all successfully discharged on the same day from the post-anesthesia care unit without any acute issues. No patients experienced readmission for inadequate analgesia, anxiety, bleeding, or post-operative nausea. Multidisciplinary planning with our plastic surgery colleagues and cancer pain specialist was critical for anticipating appropriate treatment planning prospectively and in a pre-operative fashion. Our institution has expanded the use of an ERAS (enhanced recovery after surgery) protocol, which allows for expansion of this approach in a systematic fashion, however, these findings demonstrated that same-day discharge of mastectomy patients is possible even without use of pre-operative medication regimens or obligatory use of liposomal lidocaine.