

ACS Quality and Safety Conference
Minneapolis, MN; July 24-27, 2020

- 250 words
- 2 figures/tables
- Abstracts previously submitted/presented at other meetings are eligible.

Title:

Preoperative blocks: Do they delay operative start times?

Authors:

Victoria Huynh, MD, Gretchen Ahrendt, MD, Ethan Cumbler, MD, Inge Tamm-Daniels, MD, Sarah Tevis, MD

Introduction:

Given rising healthcare costs, greater emphasis has been placed on enhancing efficiency in health care delivery. Operating room start times represent a potential area for improvement. Delays in first case start times (FCST), specifically, may contribute to delays in subsequent cases, cancellations, increased overtime costs, and may hinder the completion of larger volumes of cases overall. It is thus important to identify factors that contribute to FCST delays.

Methods:

This was a retrospective review of patients undergoing FCST mastectomies between 04/2018-09/2019. Locoregional block administration by anesthesia preoperatively was noted. Time in room and time of incision were recorded and minutes from proposed start time calculated. Delays in start times were then compared between patients with or without preoperative blocks using a Student's t-test with $p < 0.05$ considered significant.

Results:

Within this time period, 79 patients underwent FCST mastectomies. Of those, 13 patients received a preoperative block, and 66 received no block. Overall, there was no significant difference in time to incision between patients that received a block versus no block (56.9min vs 48.8min, $p=0.10$). There was, however, a significant delay to the room (21min vs 8.8min, $p=0.03$). When stratified by procedure, there was a significant delay to the room in mastectomies with implant-based reconstruction (9.9min vs 20.1min, $p=0.05$). Tables 1 and 2 summarize the results.

Table 1. Overall Delays to Operative Start Time

	Mean (Range)	P-value
Time to Room - No Block	8.8 (-3-71)	p=0.03
Time to Room - Block	21 (-2-69)	
Time to Incision - No Block	48.8 (24-109)	p=0.10
Time to Incision - Block	56.9 (29-105)	

Values indicate minutes from proposed start time ("0") with negative values representing minutes ahead of schedule.

Table 2. Delays in Operative Start Time by Procedure Type

	No Reconstruction	Implant-based Reconstruction	Free Flap	Other*
Time to Room - No Block	2.6 (10)	9.9 (37)	11.1 (16)	3.3 (3)
Time to Room - Block	1.5 (2)	20.1 (10)	N/A (0)	N/A (1)
Time to Incision - No Block	36.9 (10)	46.9 (37)	61.6 (16)	44.3 (3)
Time to Incision - Block	45 (2)	54.5 (10)	N/A (0)	N/A (1)

All values represented as average minutes (N).

*Reduction mammoplasty, LYMPHA, complex closure

Conclusions:

Preoperative blocks are important in optimizing perioperative pain control. Delays, however, may deter their utilization which is sub-optimal for patient experience. Improved processes of care are thus needed to enhance efficiency of blocks and operating room utilization.