RESULTS: Opioid Use

RESULTS: Pain Scores

Overall 0-24 hours post-op: Patients in the non-PVB group were 3.89 more likely to experience moderate-severe pain compared to PVB group (OR = 3.89 and 95% confidence interval [CI] 1.07, 21.58). Multivariate analysis showed that PVB led to, on average, lower pain scores by 1.9 points as compared to GA alone.

At discharge: Patients receiving >10 ME in the first 24 hours after surgery are 7.1 times more likely to experience moderate-severe pain at discharge when compared to patients who receive <10 ME (OR = 7.1, 95% CI 1.97, 25.5).

CONCLUSIONS

This novel study investigating PVB in women undergoing Level 2 volume displacement oncoplastic breast surgery shows that PVB significantly reduces postoperative opioid use (by 5.3 ME in 24 hours) and pain upon hospital discharge (by 2 points). Women who did not receive PVB were more likely to report moderate-severe pain. It corroborates with existing literature regarding PVB improving post-operative pain control in patients undergoing surgical treatment for breast cancer. There were no PVB-related complications noted in this retrospective cohort study. With this clinically significant benefit of superior immediate analgesia and decreased opioid use, data supports the addition of PVB with GA in optimal anesthetic protocol in oncoplastic breast surgery.

FUTURE DIRECTIONS

Additional effects of PVB in perioperative care including patient oriented outcomes of length of stay and post-operative nausea and vomiting may be value to assess for this procedure. Prospective investigation of PVB for cost-effectiveness, patient-satisfaction, and at-home opioid usage would further strengthen evidence-based practice.

ACKNOWLEDGEMENTS

The project is supported through the Moore/Moore Cancer Research Grant at TMC.

REFERENCES


Figure 1. Total ME used 0-24 hours after Level 2 volume displacement oncoplastic breast surgery by type of anesthesia received. Box plots show the 25th, 50th, and 75th percentiles.

Figure 2. PS at 0-12 hours and at discharge from hospital after Level 2 volume displacement oncoplastic breast surgery by type of anesthesia received. Box plots show the 25th, 50th, and 75th percentiles.

Table 2. Median (range) postoperative PS by time. Statistically significance noted with asterisk.

Table 3. Mean (range) postoperative PS by time. Statistically significance noted with asterisk.