## **ABSTRACT**

Title: Usefulness of two-level PECS block in providing opioid-free analgesia for intra and post-operative cancer-related breast surgery-A randomized controlled trial

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## **Objective:**

To study the intra and postoperative, safety and efficacy of the block, and the total morphine consumption and observe if there is any reduction in post operative pain over the surgical site.

## Methods:

This study included all patients of ASA 1 & 2 undergoing mastectomy surgery with axillary clearance. Block randomization was performed using computed generated random numbers used to ensure equality of numbers in the two groups studied. A written and informed consent was taken from these patients. Group 1 received general anaesthesia followed by ultrasound-guided PECS-I and II block. Group-2 received only general anaesthesia. Both Groups were given standard anaesthetic care for mastectomy surgery. Intra operative heart rate and blood pressure was monitored and post op heart rate, blood pressure, NRS scale and arm abduction was used to quantify pain response. Total morphine consumption was documented.

## **Results:**

The study showed that PECS block group used significantly less morphine(3.07mgs) during and intra and post operative period as compared the control group (5.635mgs) which was statistically significant (P=0.0001). There was small but significant decrease in the mean intra-operative systolic blood pressure as compared to control group (P=0.03). The study noted that there was significant improvement in the arm abduction in the test group as compared to control group (P=0.001). The average time for block was only 7.9 minutes and no complications were observed in the study related to the block. The block can be used for intra and post op analgesia.