

Use of PECS II Block in Partial Mastectomy for Improving Postoperative Pain Control and Mitigating Narcotic Use: Initial Results from a Randomized Control Trial

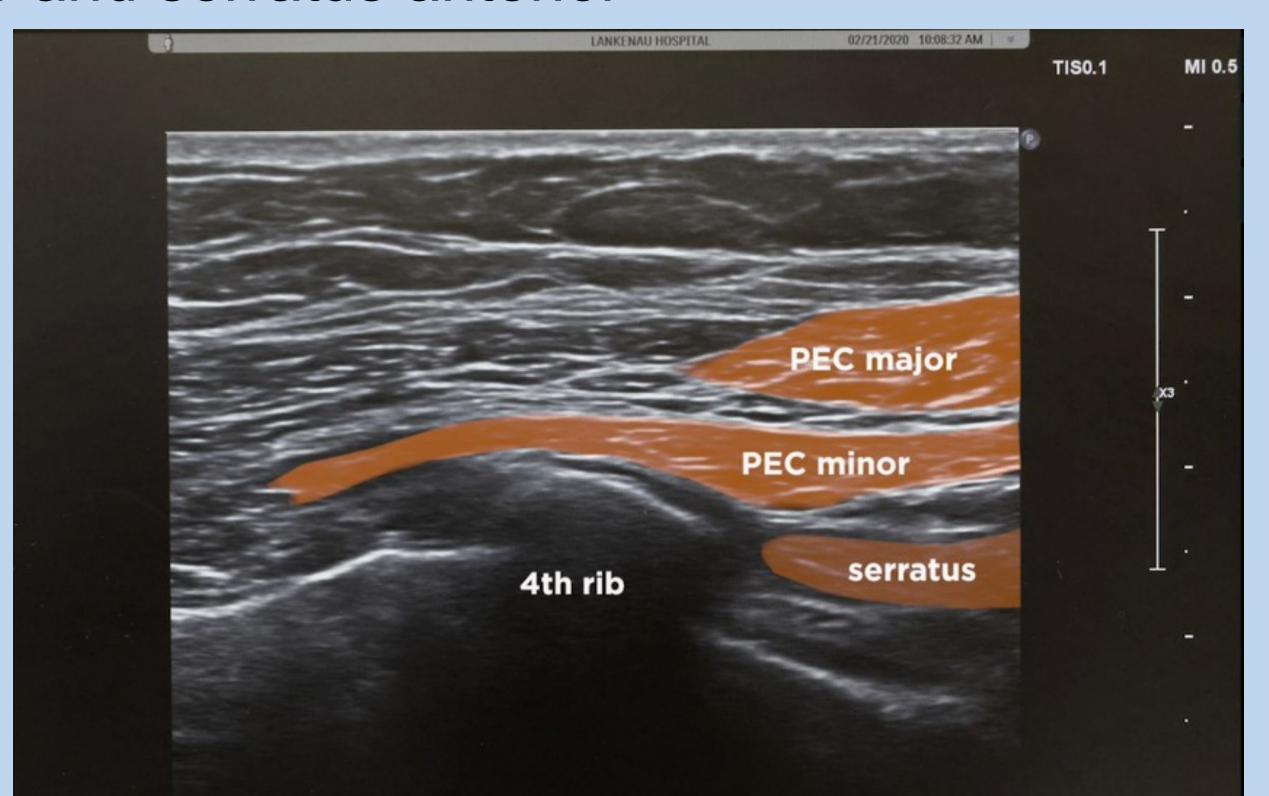
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Introduction

- PECS II Block is an interfascial local nerve block used in breast surgery which is divided into PECS I and PECS II
- PECS I targets the area between pectoralis major and pectoralis minor with local anesthesia under ultrasound guidance. PECS II targets the area between pectoralis minor and serratus anterior



Methods

Study type: Randomized Control Trial, Single Blinded
Inclusion: Partial Mastectomy patients +/- SLN biopsy
Exclusion: Presence of breast implants, allergy to Marcaine
Primary outcome: VAS 0-10 pain score in PACU, POD1 and POD3

Secondary outcome: narcotic use from intraoperative record, verbal report POD1 and POD3 and final pill count on postop visit

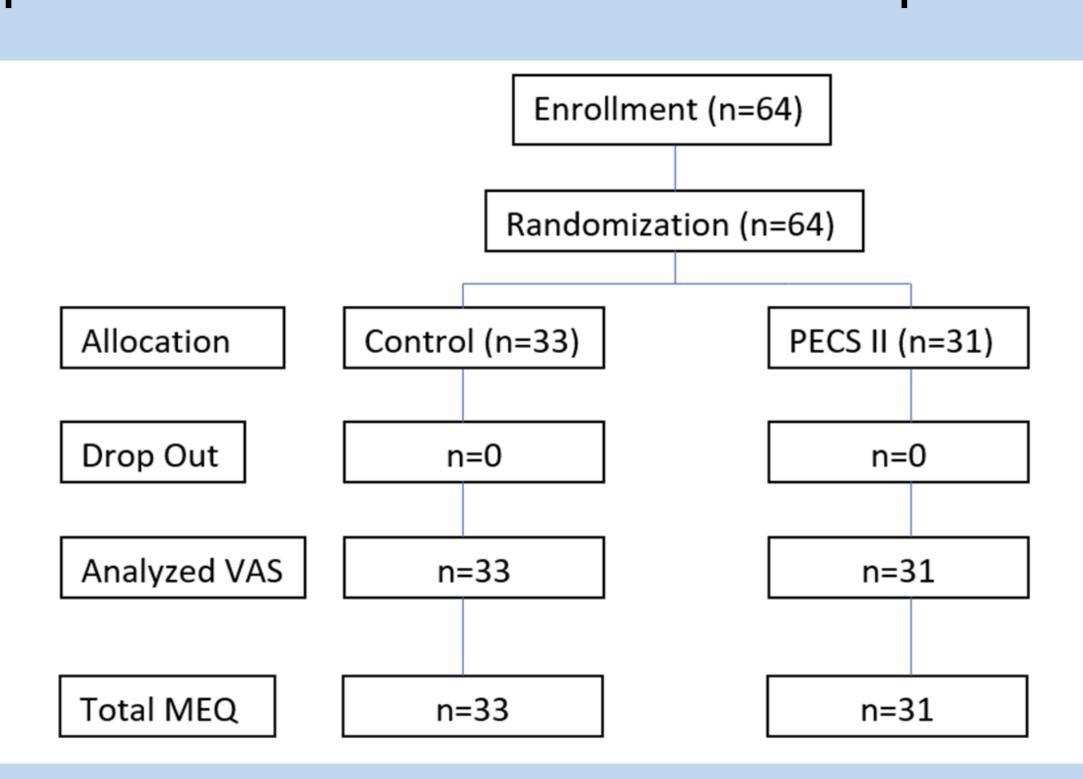


Table 1. Patient Characteristics in Control vs

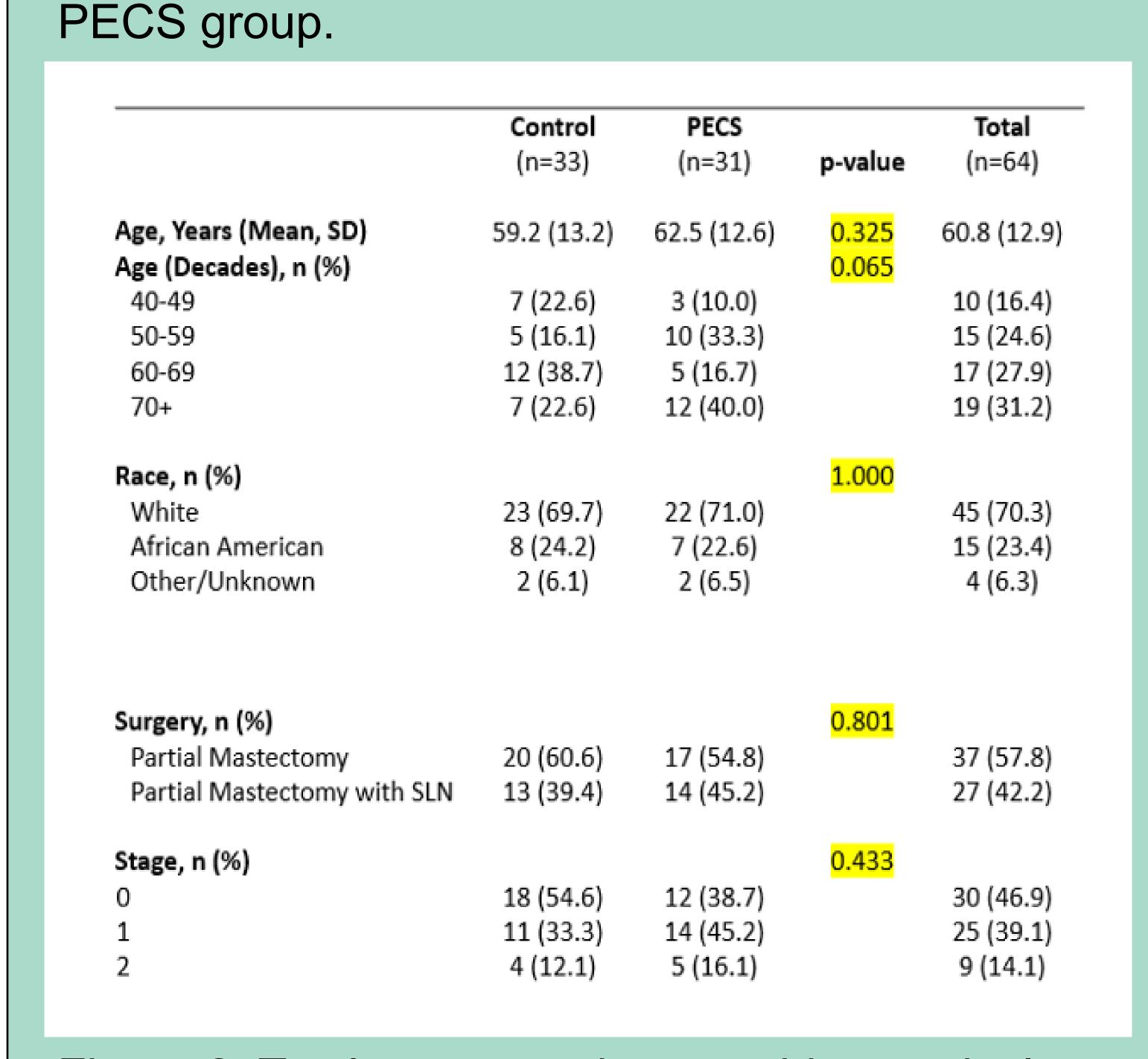
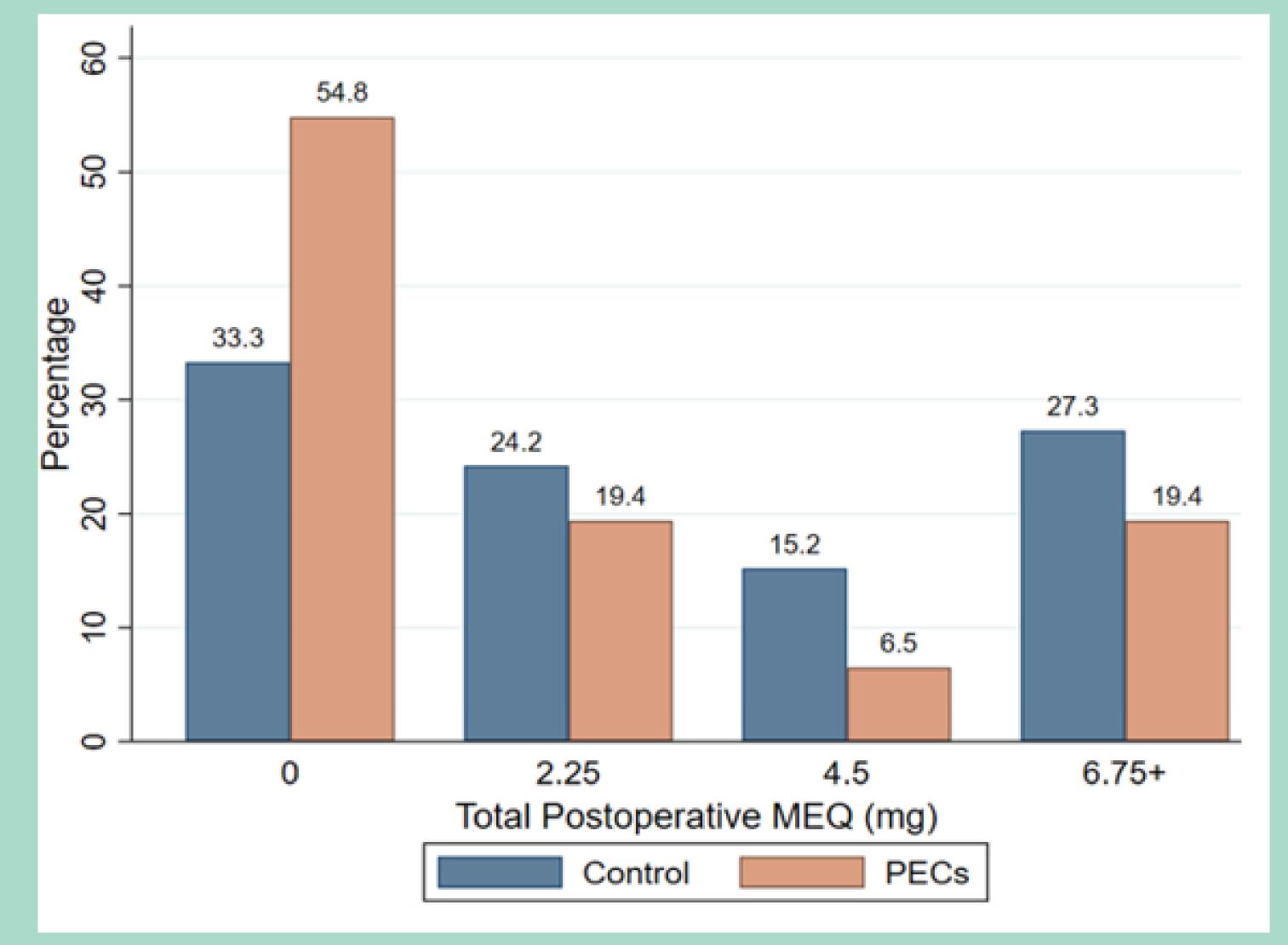


Figure 2. Total postoperative morphine equivalents (MEQ) in Control vs PECS group.



Results

Figure 1.Median VAS pain scores immediately postop, 3 hours, 24 hours, and 72 hours postop.

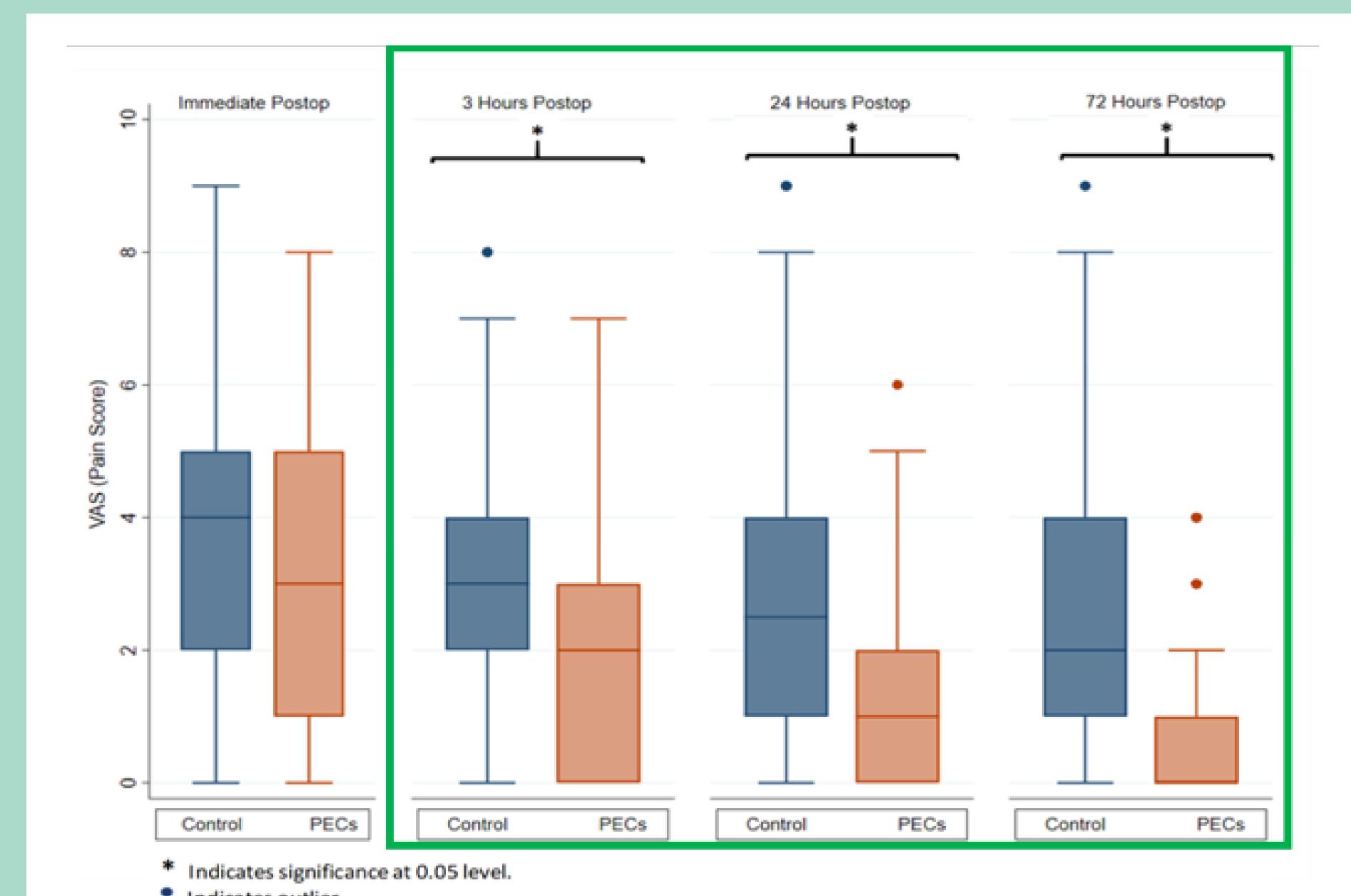


Table 2. Narcotic use in Control vs PECS group

	Control	PECS		Total
	(n=33)	(n=31)	p-value	(n=64)
Intraoperative MEQ (mg), Median (IQR)	10 (10-17.5)	10 (10-15)	0.728	10 (10-17.5)
Intraoperative Propofol Use (mg), Median (IQR)	200 (180-230)	200 (150-200)	0.055	200 (160-205)
24 Hour Postoperative MEQ (mg), Median (IQR)	2.3 (0-4.5)	0 (0-2.3)	0.018	2.3 (0-4.5)
Total Postoperative MEQ (mg), Median (IQR)1	2.3 (0-6.8)	0 (0-4.5)	0.103	2.3 (0-4.5)

- There were no significant baseline patient characteristics between the PECS and Control groups.
- The PECS group had significantly lower VAS pain scores than the Control group at 3, 24, and 72 hours postoperatively.
- The median total postoperative MEQ was 0 mg in the PECS group and 2.3 mgs in the Control group.

Conclusions

- PECS II decreases pain at 3, 24 and 72 hours postoperatively
- PECS II reduces median postoperative narcotic use to 0 MEQ
- Efforts should be aimed at educating surgeons on how to perform the US Guided PECS II independently



References

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