

How Effective is TAP-Block in Reducing Pain and Opioid Needs Following Bariatric Surgery?

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**AdventHealth Celebration
Celebration, FL, USA**



Conflict of Interest

I have no potential conflict of interest to report



BACKGROUND

- **Ultrasound-guided transversus abdominis plane (TAP) block has been found to reduce surgical pain and postoperative opioid needs.**
- **We incorporated TAP-block as an adjunct to our MMA regimen but discontinued its use after failing to observe a beneficial effect on pain management.**
- **We have now re-examined changes in pain management since discontinuation of the procedure.**

OBJECTIVE

- ***To compare* postoperative pain scores and opioid needs between bariatric patients who had a TAP-Block and those who had surgery following discontinuation of the procedure (Non TAP)**

METHODS

Design: Retrospective data analysis of surgeries performed with or without TAP block April-Dec 2022

TAP Block: USG TAP Block performed by anesthesiologist prior to surgery (bupivacaine PF 0.5% injection)

Patient Population: n=149; 75 TAP; 74 Non TAP

Surgeries:

- 68% F, 32% M; 62% RYGB, 38% SG (NS TAP vs. Non TAP)
- All surgeries performed 'totally' robotic by a single surgeon using the da Vinci (Xi) robotic system
- TAP- and Non TAP-Block patients were under an identical ERABS protocol and MMA regimen

ERABS Protocol

CHO drink afternoon, evening, and 2-3 hr before surgery
Limited fasting- only 2-3 hours prior to surgery
Scopolamine patch placed night prior

Preop

Acetaminophen 1000 mg
Aprepitant 40 mg
Dexamethasone 10 mg-given at induction

Postop

Dexamethasone scheduled 10 mg q8 surgery dose and 10mg PRN
Ondansetron scheduled 8 mg q6
Acetaminophen scheduled 1000 mg q8
Limited narcotics
Early GI stimulation-clears PACU, protein 4 hrs post op
Early and frequent ambulation



METHODS

Measurements:

- **Patient characteristics**
- **Operative (OP) times**
- **Time in the Post Anesthesia Care Unit (PACU)**
- **Length of hospital stay (LOS)**
- **Peri- and postop (30-d) complications, readmits, reops, mortality**
- **Pain management (pain scores, opioid usage) in the PACU and on the hospital UNIT**

RESULTS Characteristics

Measure	TAP	Non TAP
Age	45.31 ± 1.36	45.90 ± 1.30
Wt. kg	127.20 ± 2.94	124.49 ± 3.17
BMI	45.91 ± 0.79	45.69 ± 0.97
Co-morbidities	2.63 ± 0.02	3.12 ± 0.02*
% OSA	53%	73%
% T2D	27%	36%
% HTN	57%	67%
% Lipid Abnormal	51%	65%
% Dep/Anxiety	48%	44%
% GERD on Med	25%	29%
% Cardiac Issues	8%	8%

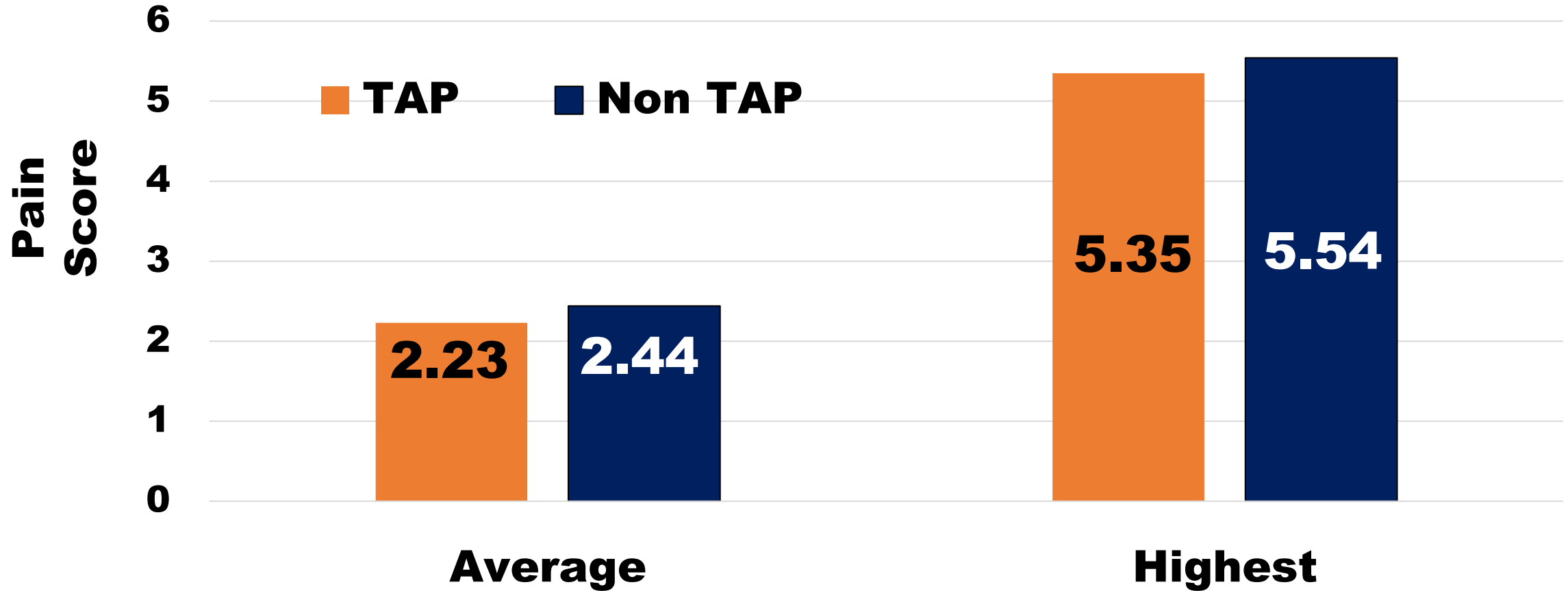
*p = 0.03

RESULTS Surgery Outcomes

Outcomes	TAP	Non TAP
Op Time (min)	79.02 ± 3.54	82.12 ± 3.77
PACU Time (min)	148.48 ± 8.59	161.50 ± 8.45
LOS (days)	1.15 ± 0.02	1.13 ± 0.02
30-day readmits	1	4
Re-ops	0	1
Complications	0	2

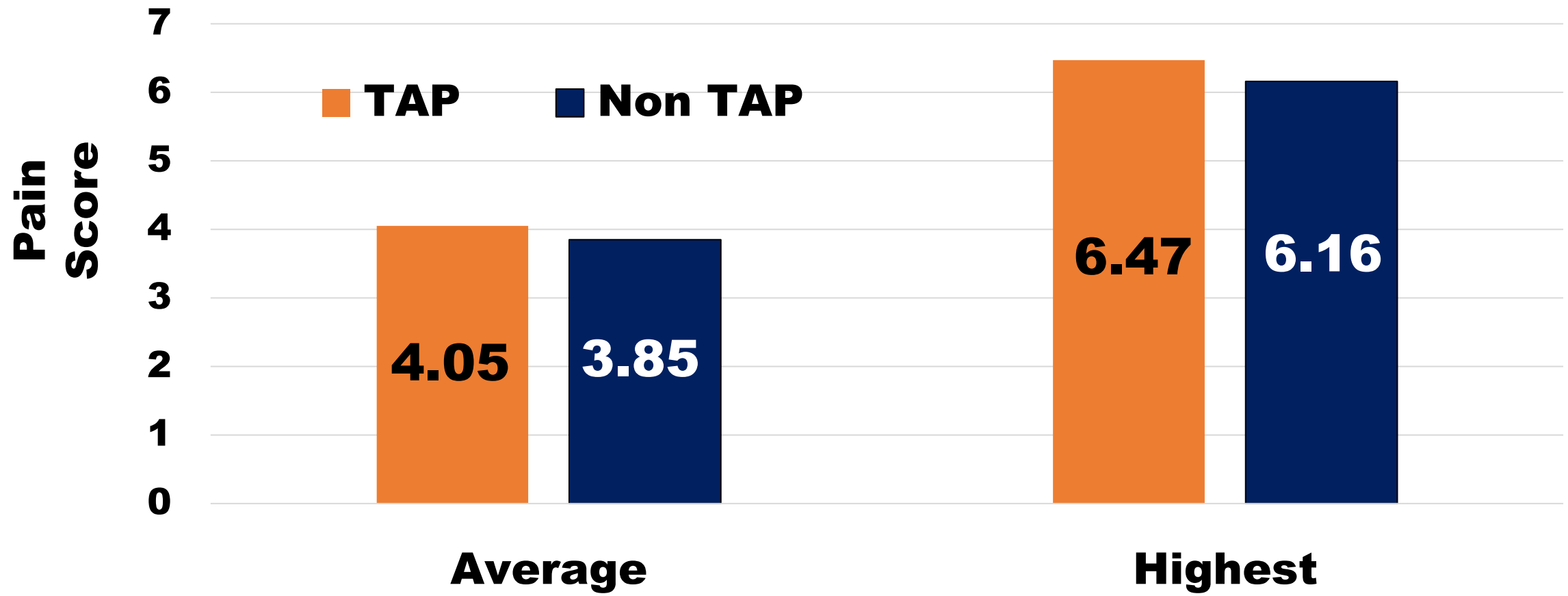
p>0.05=NS

Pain Scores PACU*



**p>0.05=NS TAP vs. Non TAP*

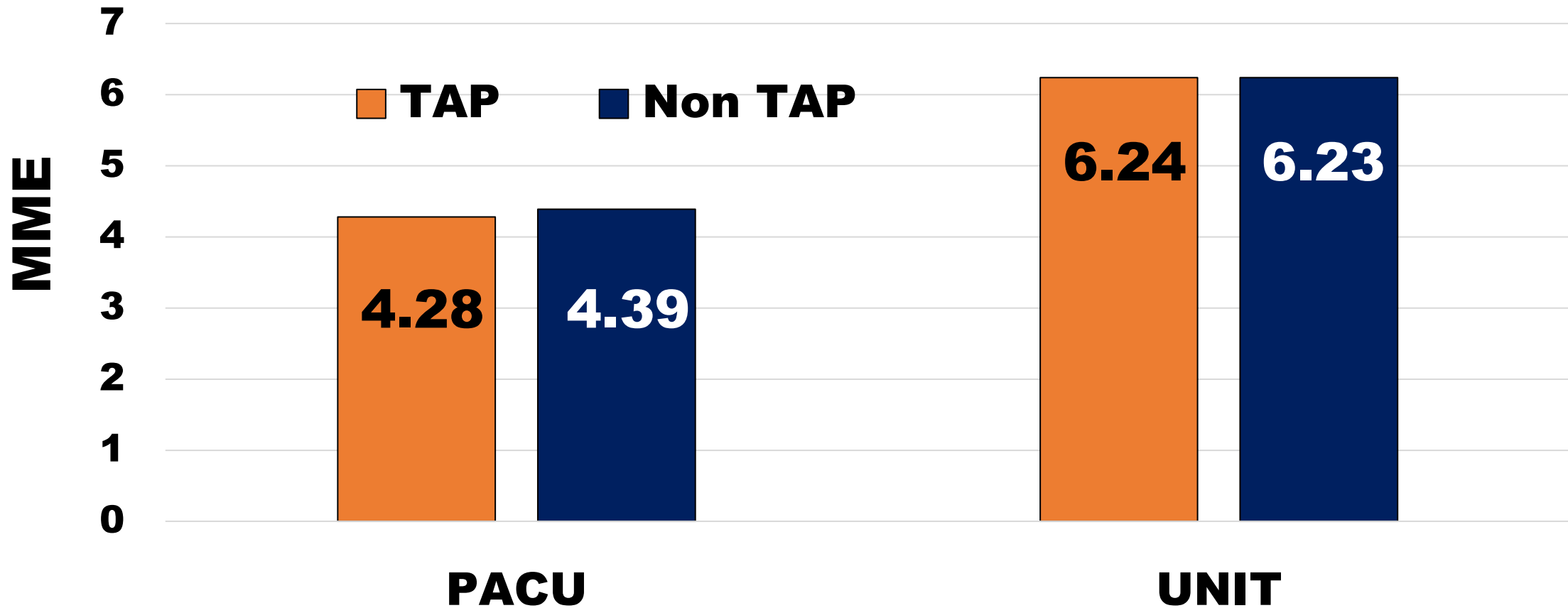
Pain Scores UNIT*



**p>0.05=NS TAP vs. Non TAP*



Opioid Use



**p>0.05=NS TAP vs. Non-TAP*

PACU Opioid Use Categories

Measure	TAP	Non TAP
None (0 mEq)	23%	32%
Low (4.8 mEq) (>0 to 7.5 mEq)	68%	53%
Mod (11.2 mEq) (>7.5 to ≤15 mEq)	8%	15%
High (16.7 mEq) (>15 mEq)	1%	0%

Chi Sq p > 0.05 = NS

UNIT Opioid Needs Categories

Measure	TAP	Non TAP
None (0 mEq)	37%	42%
Low (4.6 mEq) (>0 to 7.5 mEq)	16%	19%
Mod (10.4 mEq) (>7.5 to 15 mEq)	37%	26%
High (18.7 mEq) (>15 mEq)	9%	13%

Chi Sq p >0.05 = NS

TAP-BLOCK COSTS



ADDITIONAL
\$713.31

CONCLUSION

TAP Blocks add to surgical expense and have no additive benefit to the MMA regimen in reducing postoperative pain and opioid use.