

Laparoscopic-assisted Transversus Abdominis Plane block versus Port-Site Infiltration with local anesthetics in Bariatric Surgery: a Double-blind Randomized Controlled Trial

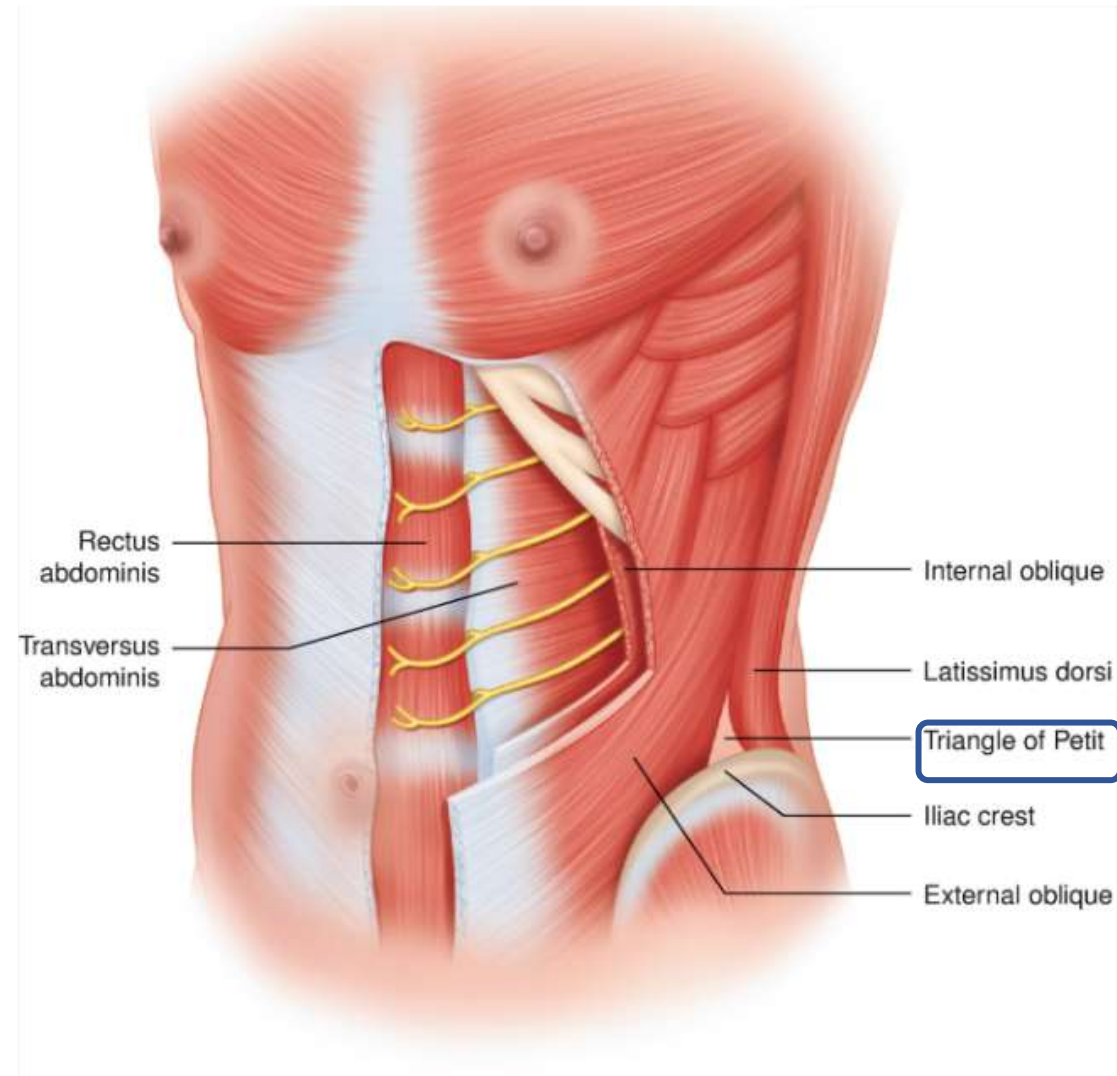
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Background

- Since 2001, Rafi
- Ultrasound or laparoscopic –guided
- TAP block > placebo in ↓ post-operative pain in bariatric surgery
- Safe and economic



Methods and Materials

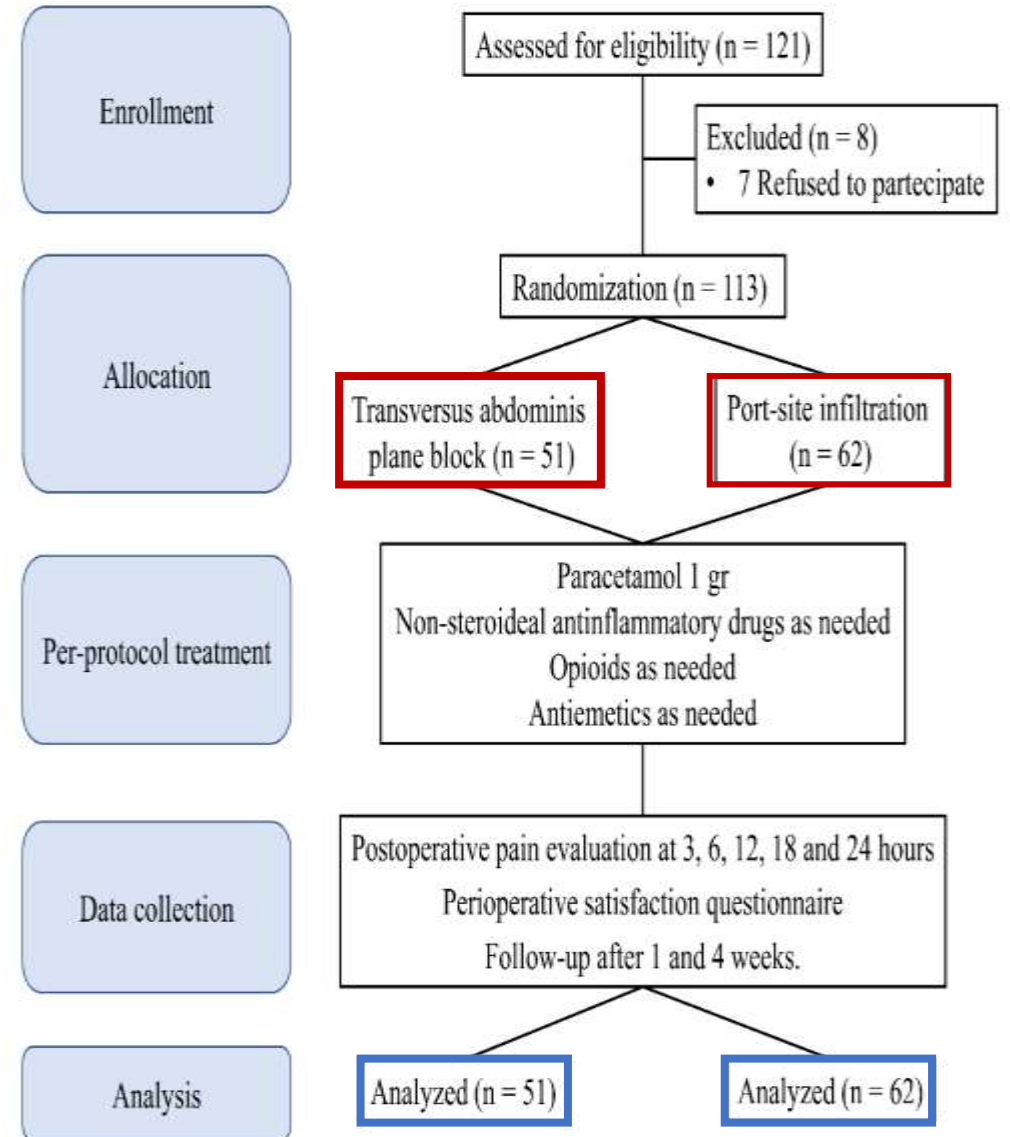
Endpoints

Outcomes **TAP block vs PSI**

- I. VAS at 24 hours
 - II. VAS at 3, 6, 12 and 18 hours
- Perioperative satisfaction score, time of first walk and flatus, operative time, LOS, complications

Elegibility Criteria

- I. Primary or revisional laparoscopic bariatric surgery
- II. July 2020 – July 2021



Dermographics

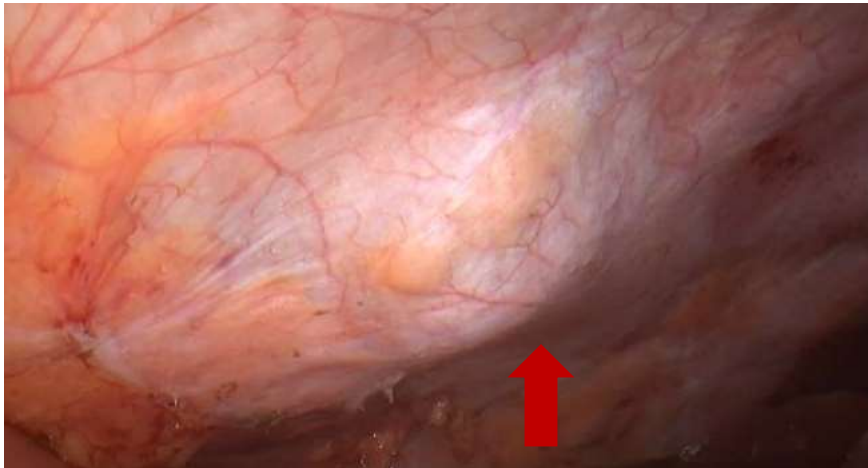
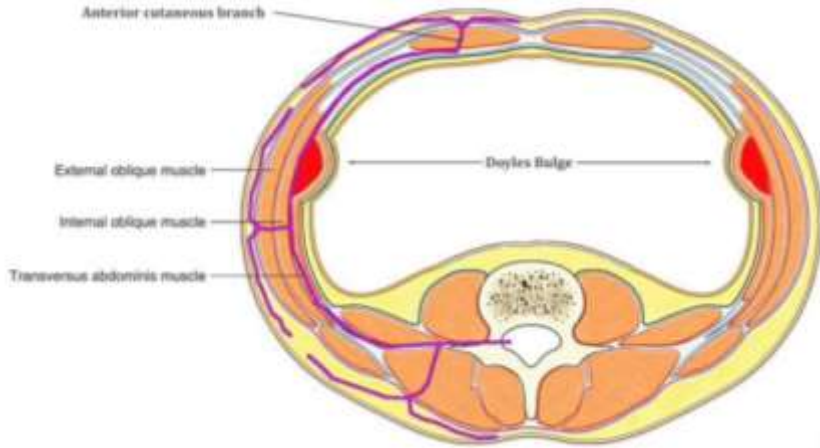
Characteristics	TAP block group (n=51)	PSI group (n=62)	p
Age, years (SD)	47.9 (10.1)	48 (12.1)	0.956
Female gender, n (%)	39 (76.5)	49 (79)	0.745
Baseline BMI, kg/m ² (SD)	40.4 (5.9)	40.5 (5.9)	0.876
Diabetes, n (%)	6 (11.8)	9 (14.5)	0.669
Hypertension, n (%)	12 (23.5)	21 (33.9)	0.231
Cardiac disease, n (%)	8 (15.7)	3 (3.2)	0.021
OSAS, n (%)	20 (39.2)	29 (46.8)	0.422

Methods and Materials



40 ml of Ropivacaine 0.25% by surgeon

TAP block technique



PSI technique



Results

Type of operation	Transversus Abdominis Plane block group (n=51)	Port-Site Infiltration group (n=62)	p
→ Sleeve gastrectomy, n (%)	24 (47.1)	23 (37.1)	0.495
Operative time, min (SD)	81 (19)	77 (21)	0.525
→ Roux-en-Y gastric bypass, n (%)	18 (35.3)	31 (50.0)	0.322
Operative time, min (SD)	132 (40)	138 (34)	0.562
→ Revisional surgery, n (%)	9 (17.6)	8 (12.9)	0.549
Operative time, min (SD)	146 (38)	126 (37)	0.286

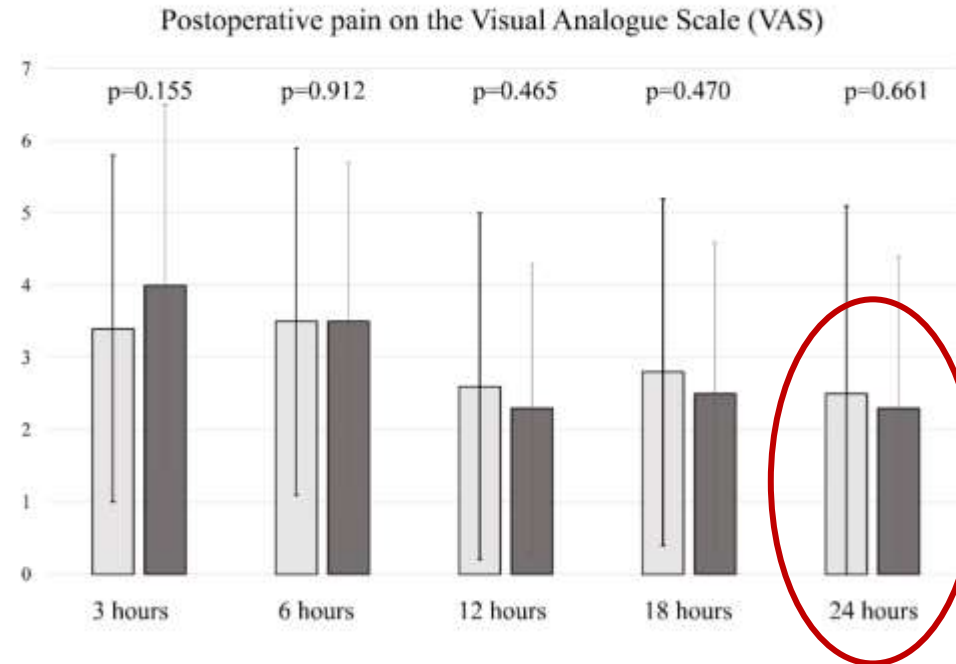
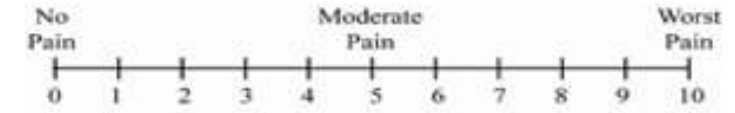
1 complication in TAP block group vs 0 in PSI group

→ Reoperation 48 hours after RYGB due to an intraluminal bleeding of the jejuno-jejunal anastomosis

→ Discharged at post-operative day 5

Results

TAP vs PSI group



VAS at 24 h

2.5 ± 2.6 vs 2.3 ± 2.1

(p=0.661)

No significant difference in post-operative pain

Results

TAP vs PSI group



Secondary endpoints	TAP block group	PSI group	p
First flatus	19.4 ± 9.3	19.5 ± 7.7 hours	0.940
First walk	7.2 ± 5.0	6.4 ± 4.5 hours	0.361
Satisfaction score	154 ± 10	154 ± 16	0.828
Operative time	110 ± 42	114 ± 41	0.658
Length of stay	3.4 ± 1.5	3.2 ± 1.1 days	0.392



No significant difference

Conclusions

- ✓ **TAP block and PSI have similar clinical outcomes.**
- ✓ **No advantage from Transversus Abdominis Plane Block in bariatric surgery.**

Limitations:

- VAS score and Leiden Perioperative care Patient Satisfaction questionnaire
- Operator-dependent technique
- Single-centre study

Thank you!



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