Pain Outcomes in Emergent Versus Elective Ventral Hernia Repair

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The Clinical Assumption

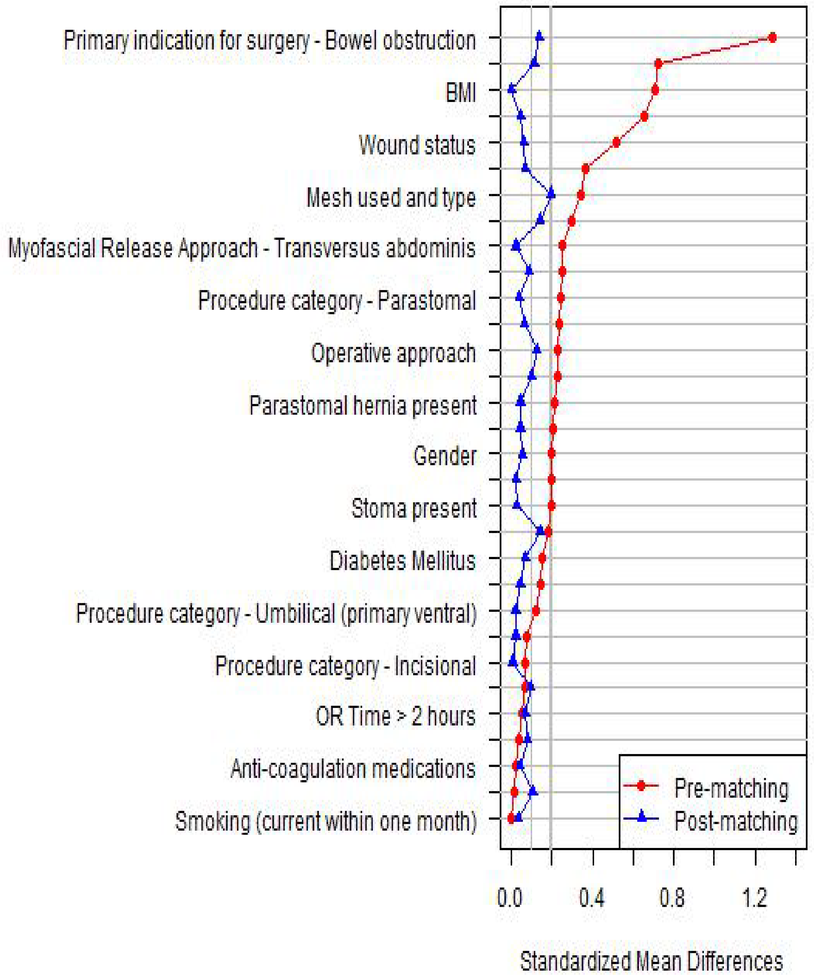
Emergent ventral hernia repairs are traditionally perceived to have worse outcomes than elective repairs due to acute presentation and surgical urgency.

This study challenges that assumption by examining long-term patient-reported pain outcomes (PROMIS) between emergent and elective ventral hernia repair after risk adjustment.

Methods

- Data Source: Retrospective cohort analysis using Abdominal Core Health Quality Collaborative (ACHQC) registry (2013-2024).
- Study Design: Propensity score matching (1:3 ratio) utilized to control for patient demographics, hernia characteristics, comorbidities, operative factors, and baseline pain scores.
- Primary Outcome: PROMIS Pain 3a scores at one year post-operatively.
- Secondary Outcome: 30-day pain scores and complications

Love plot



Results

Total cohort: 11,831 patients.
Post-matching: 264 patients (71 emergent, 193 elective).

PROMIS Pain 3a Scores by Surgical Setting (After Propensity Score Matching)

Time Point	Emergent (n=71)	Elective (n=193)	P-value
Baseline	50 ± 10	49 ± 10	0.2
30-day	45 ± 9	45 ± 9	0.6
1-year	34 ± 6	40 ± 9	0.01
Change from baseline	**-18 ± 10**	**-9 ± 10**	**0.002**

**Higher scores indicate more pain. Negative change values indicate pain reduction.*

Conclusion

Surgical Urgency Does Not Compromise Pain Recovery

- Contrary to clinical expectations, emergent ventral hernia repair patients demonstrated **superior long-term pain outcome**s compared to elective patients after comprehensive risk adjustment.
- These findings challenge the prevailing assumption that emergent repairs inherently lead to worse outcomes

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