

## Short- and mid-term outcomes of prehabilitation in abdominal wall surgery: a retrospective cohort study

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### Introduction

Few current data on **prehabilitation (PH)** in abdominal wall surgery (AWS)

Aim: **outcomes of patients with and without PH before AWS**

### Methods

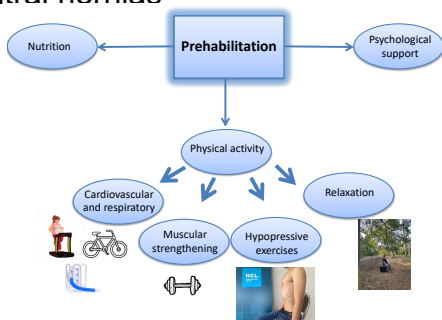
Cross-sectional study 2021-2024

Consecutive primary and incisional ventral hernias

PH for

- defect >10 cm
- BMI >30 kg/m<sup>2</sup>
- significant comorbidities
- sedentary patients
- age >70 years

Primary outcome: **30-day morbidity**



### Results

**N=315**, no pre- and intraoperative difference except for botulinum toxin injection (BTI: PH 62% vs. no PH 8%,  $p<0.001$ ) and median hernia defect size (PH 10 cm vs. no PH 6 cm,  $p<0.001$ )

Table 1. Postoperative outcomes	PH n=114	No PH n=201	P-value
Morbidity	35 (31%)	61 (30%)	0.948
Length of stay, days	3 (2-5)	2 (1-5)	0.763
<b>Recurrence</b>	<b>2 (2%)</b>	<b>14 (7%)</b>	<b>0.043</b>

Table 2. Predictors of complications in patients who received BTI	Multivariable OR (95% CI)	P-values
Age >70 years	1.2 (0.4-3.5)	0.710
BMI >30 kg/m <sup>2</sup>	1.1 (0.4-2.9)	0.794
Diabetes	2.5 (0.6-10)	0.216
Smoker	1.7. (0.5-5)	0.363
<b>Prehabilitation</b>	<b>0.3 (0.1-0.9)</b>	<b>0.027</b>
Hernia >10 cm	1.0 (0.3-2.7)	0.959
Component separation	1.5 (0.5-4.2)	0.495

### Conclusion

Decreased morbidity among patients with BTI and PH → **potential benefit of coupling PH and BTI**



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