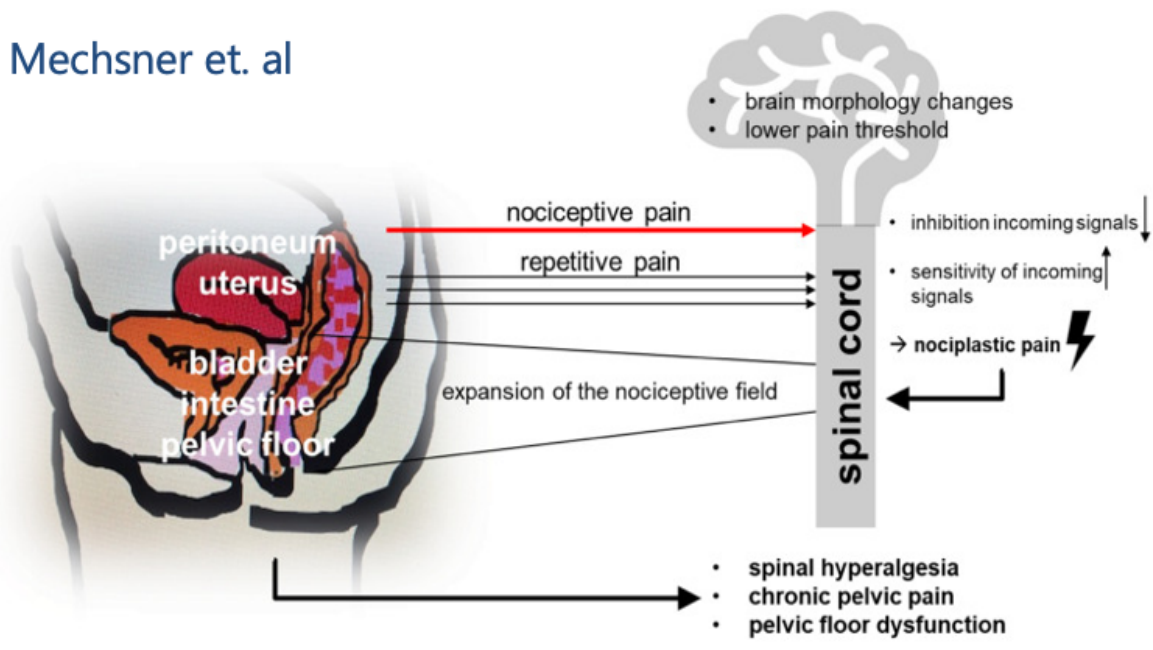


Early Postoperative Pain in Women Undergoing Non-Endometrial Surgery: A Single-Center, Propensity-Matched Retrospective Analysis

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INTRODUCTION

Endometriosis affects one in ten women globally (1) and is characterized by growth of endometrial tissue outside the uterus, leading to chronic pelvic pain via central sensitization (2,3). Our understanding of acute postoperative pain in this population is extremely limited.



METHODS

Aim: To characterize early postoperative pain patterns in adult, premenopausal women with endometriosis undergoing non-endometrial invasive surgery, compared to propensity-matched controls. ASA IV and V and OBGYN and urology procedures were excluded.

OUTCOMES MEASURED

Primary Outcomes

- Pain area under the curve (AUC) in the first 2 hours post-surgery
- Pain AUC on postoperative day 0 (POD0)
- Total PACU + POD0 opioid consumption in morphine milliequivalents (MME)

Secondary Outcomes

- POD0 maximum + average pain scores
- First pain score recorded in PACU
- PACU length of stay
- Inpatient pain service consult rate

Propensity Matching Strategy

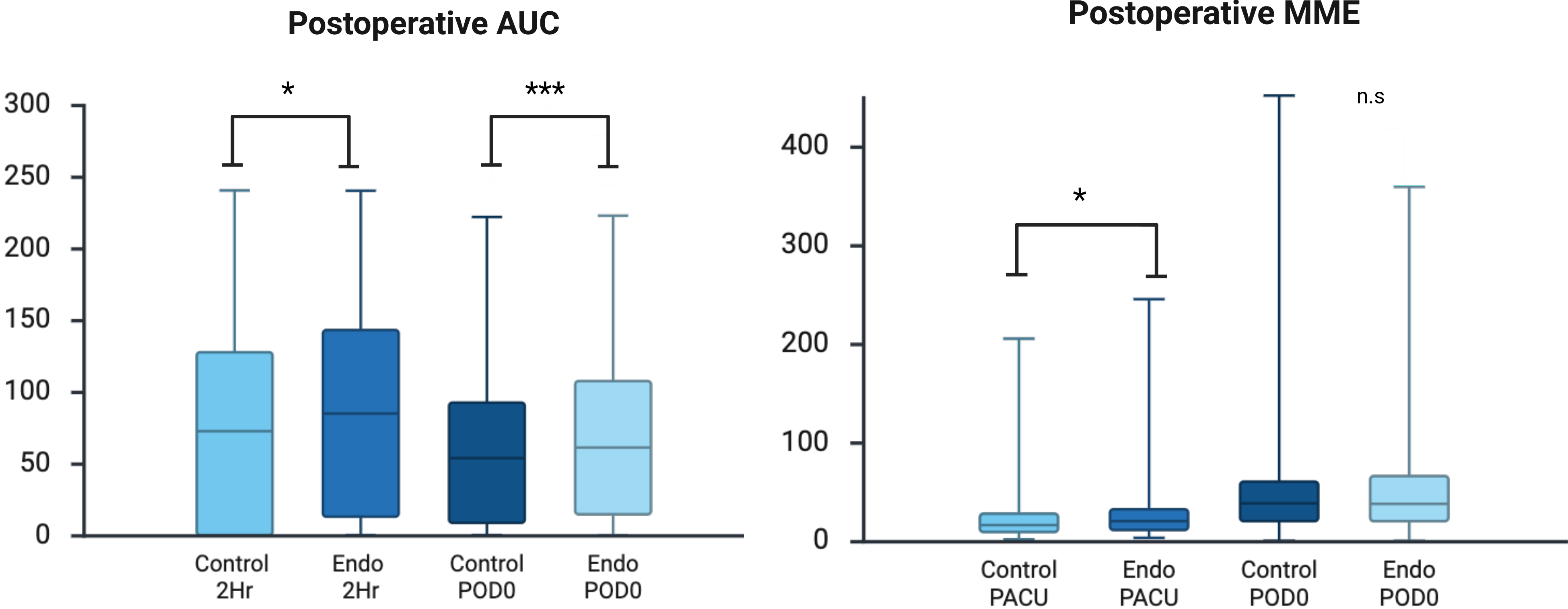
3 : 1

control : endo

Matched on:

- Age
- ASA classification
- Anesthesia type
- Surgical service
- Preoperative pain history

RESULTS



	Endometriosis (n=556)	Controls (n=1,668)	p-value
Age	39.0 (7.2)	39.1 (7.2)	0.963
ASA Score I / II / III	11.3% / 61.9% / 26.8%	11.1% / 62.4% / 26.5%	0.973
Preadmission pain management	114 (20.5%)	137 (8.2%)	<0.001 *
First PACU pain score	3.5 (3.7)	3.1 (3.5)	0.017 *
Last PACU pain score	2.5 (2.6)	2.3 (2.4)	0.07
PACU length of stay (min)	136.4 (84.9)	135.1 (89.1)	0.762
Average pain score POD0	3.6 (2.8)	2.9 (2.6)	<0.001 *
Inpatient pain consult	70 (12.6%)	170 (10.2%)	0.114
Regional anesthesia use	34 (6.0%)	101 (6.1%)	0.959

CONCLUSION

KEY FINDINGS

- Endometriosis patients experience significant and substantial early postoperative pain burden and **receive more opioids in the PACU**
- On POD0, endometriosis patients report significantly more pain **but do not receive significantly more opioids.**

FUTURE DIRECTIONS & CLINICAL IMPACT

Next steps....

- Subgroup analyses of intra-abdominal vs. non-abdominal surgery and first surgery vs. history of >1 surgery
- Regression models to identify preoperative risk factors for PACU and POD0 pain in endometriosis patients undergoing non-endometrial surgery
- Work towards developing targeted pain protocols for these patients

What's the clinical impact of our findings?

As clinicians we should prioritize multimodal pain regimens for this population in the perioperative period to facilitate *improved pain outcomes* and *quicker discharge from PACU*.

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