

Retrospective Study of Outcomes of External Cephalic Version (ECV) with and without Different Types of Neuraxial Anesthesia at our Institution

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Introduction

- Breech presentation carries excess risk for neonatal morbidity¹
- ECV has success rate of up to 60%²
- Several randomized studies suggest benefit to anesthesia
- We examined the impact of NA on success rate of ECV in the general population

Methods

Study Design: Retrospective analysis of 301 patients (269 analyzed)

- 12/22/2016 – 8/1/2022
- Low dose spinal: ≤ 9 mg bupivacaine
- High dose spinal: >9 mg bupivacaine

Inclusion criteria: Non-emergent ECV procedure



Patient Population

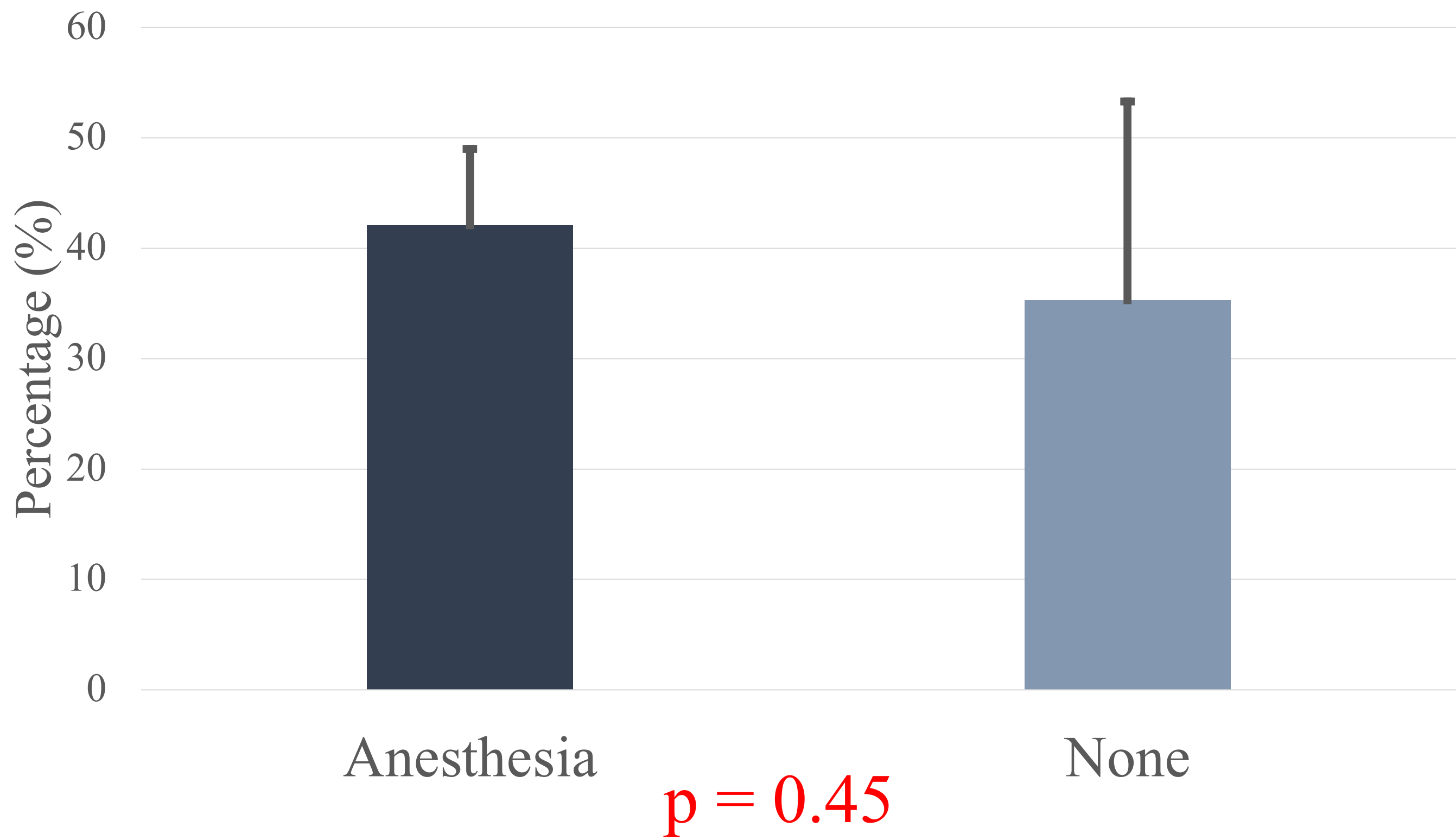
Age (yrs)	32.8 ± 4.3
BMI	29.6 ± 5.6
Gestational Age (wks)	38 (37.1-39)
Fetal Weight (g)	3281 ± 443

Results

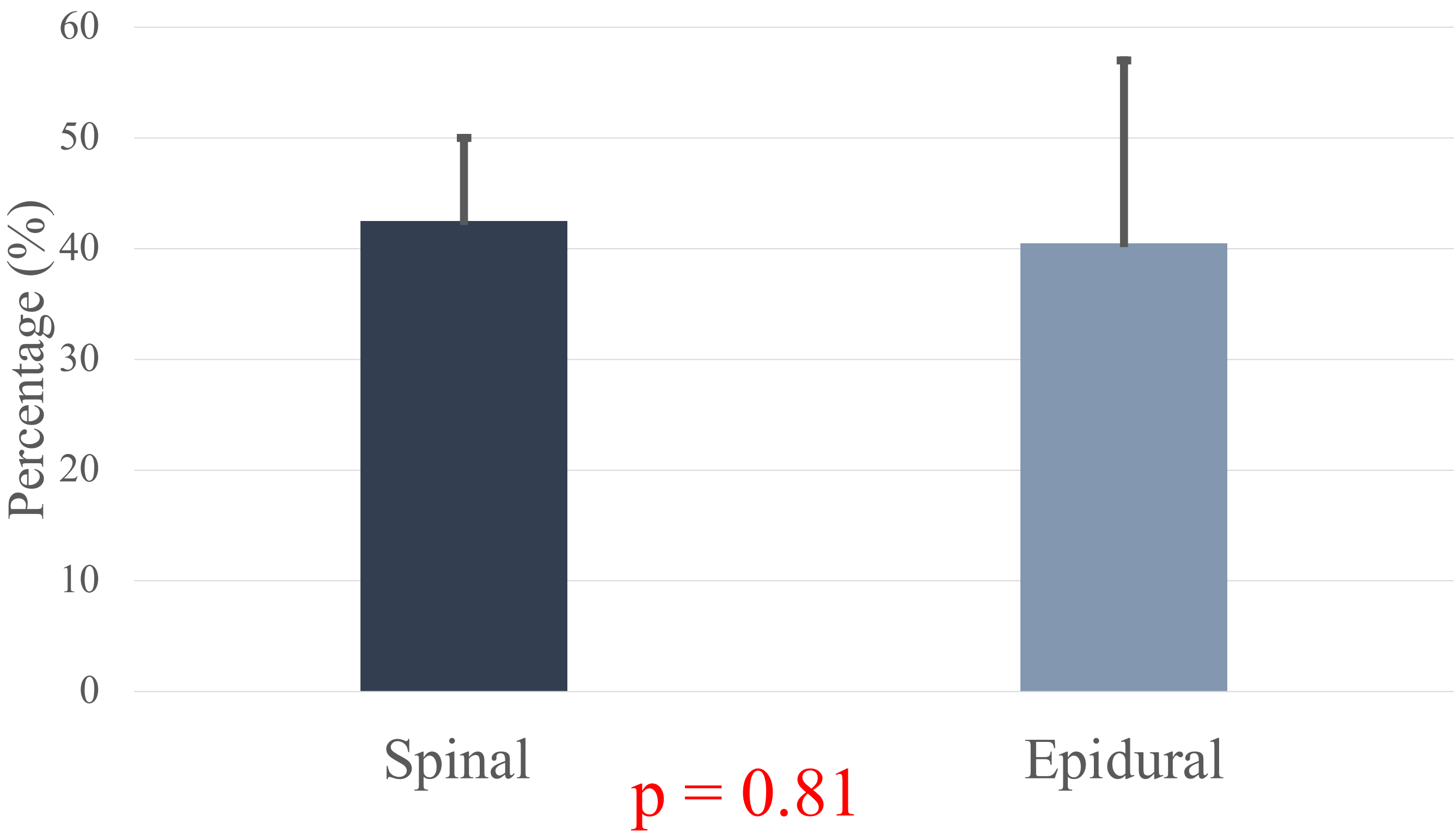
- 41.3% success
- Neuraxial anesthesia: 87.4%



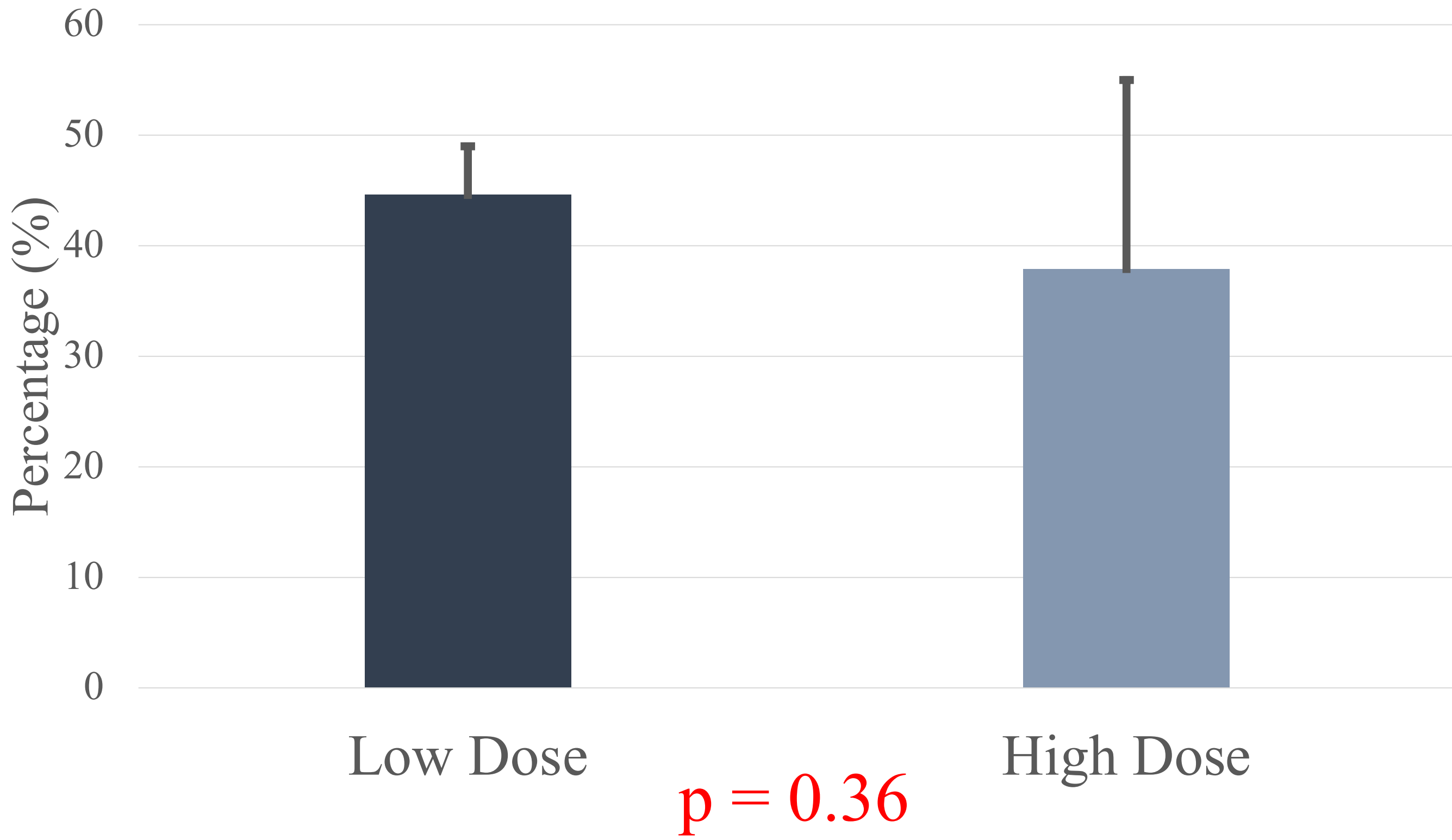
Success of ECV with and without the Use of Neuraxial Anesthesia



Success Between Spinal and Epidural Anesthesia



Success Between Low Dose and High Dose Spinal Bupivacaine





Primary Outcome

- Anesthesia: Non-significant difference
- Spinal dose:
 - No effect on success rates
 - No effect on PACU time (227±176 v. 267±151; p=0.45)

Additional Results

- Terbutaline was used in 169 (62.8%) and associated with success (73% v. 27%; p=0.004)
- 34 (12.6%) urgent CD
- Of the patients who did not receive anesthesia, 6% (2/34) required a CD the same day

Discussion

- No significant increase in success
- Selection bias by OB and anesthesia
- Randomized studies select patients
- May be an effect in some populations
- Unmeasured confounders

References

1. PMID: 28473516
2. PMID: 26414123
3. PMID: 23614959