

Preventing Postpartum Hemorrhage: Strategies for Optimizing Maternal Outcomes

BACKGROUND

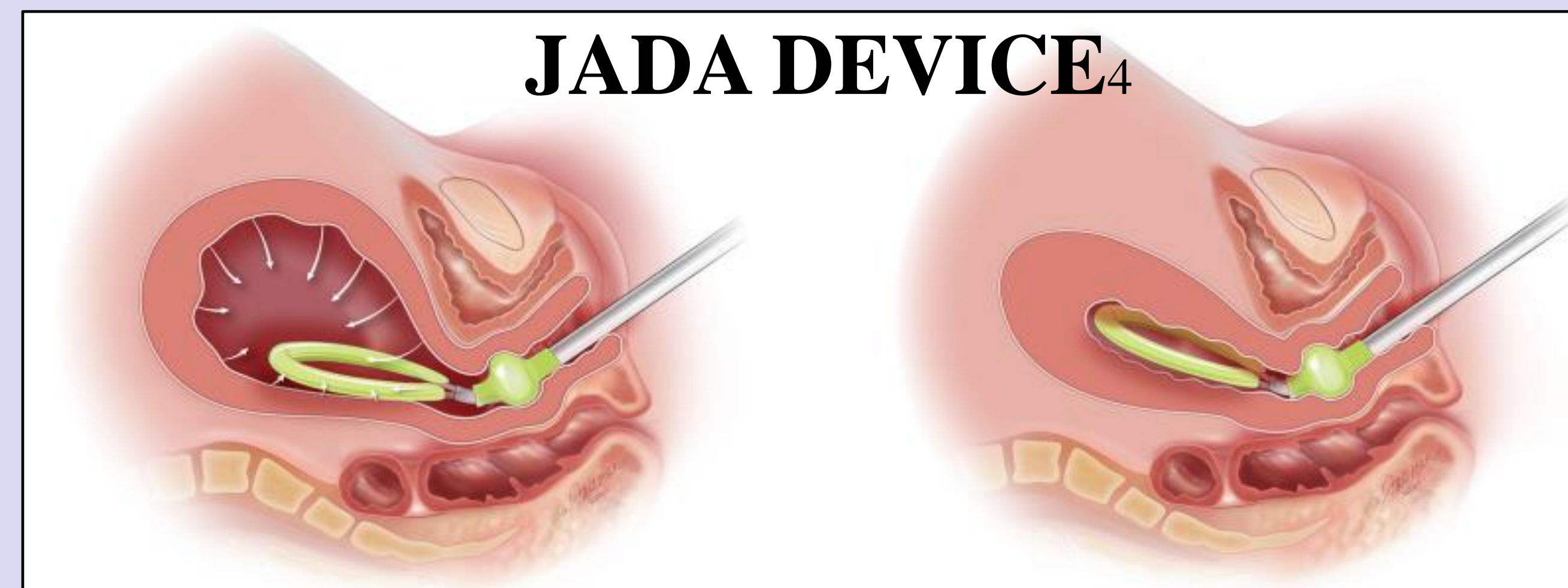
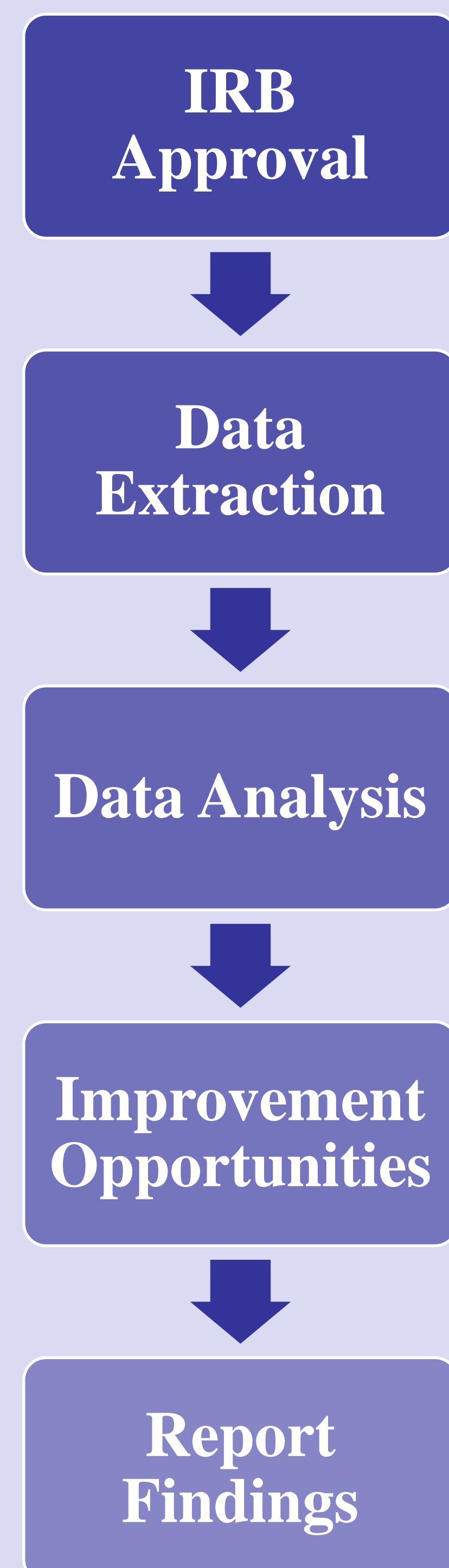
Postpartum hemorrhage (PPH) is a leading cause of preventable maternal morbidity and mortality.^{1,2,3,5}

Methods of PPH management include bimanual massage, uterotonics, surgical intervention, and novel devices like the JADA, a low-level vacuum device for promoting uterine contraction.¹

PROJECT AIM

Evaluate the effectiveness of the JADA device in managing PPH by analyzing the timing of its application and maternal outcomes from July 2023 to July 2024 with the goal of informing best practices for reducing maternal morbidity and mortality.

PROJECT DESIGN

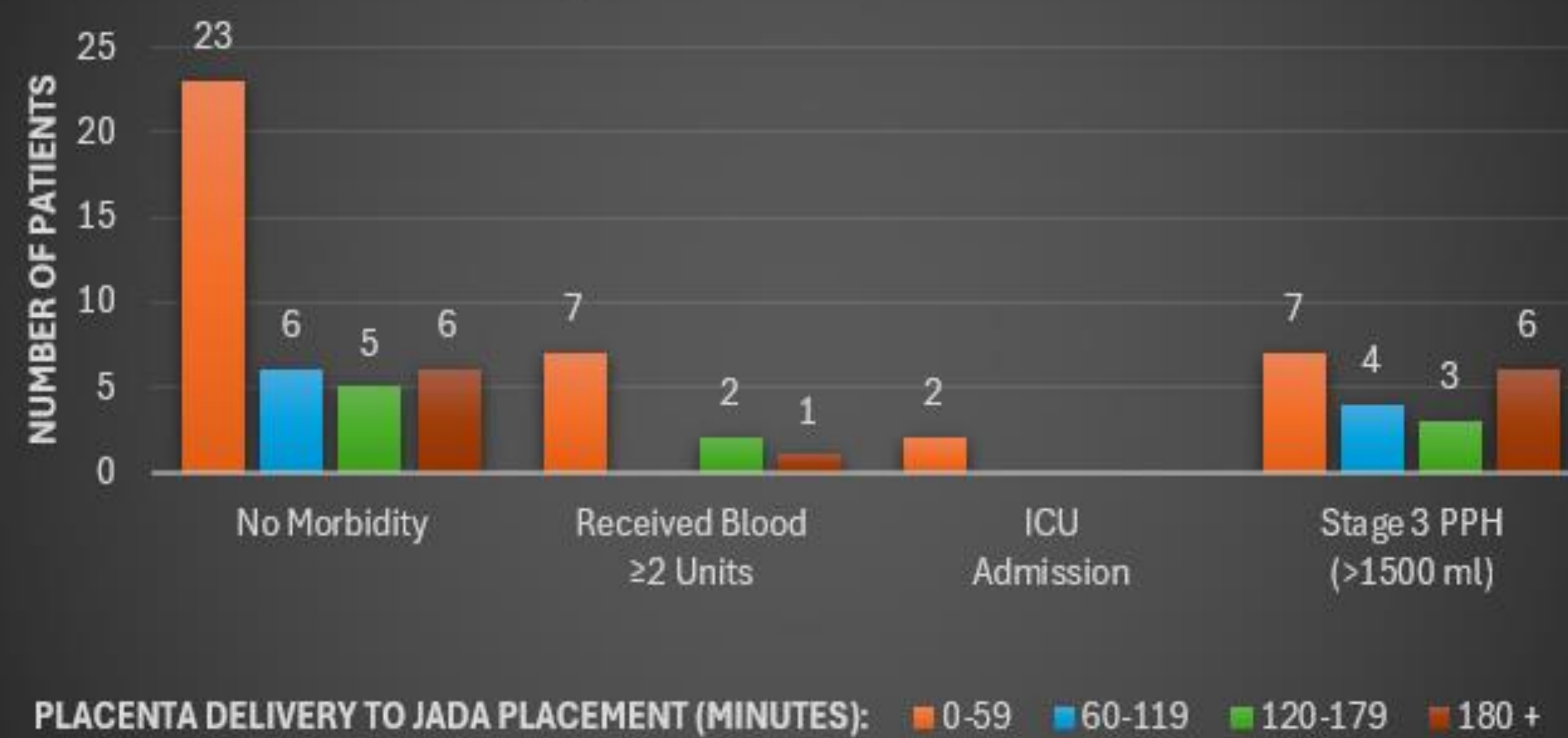


Low-level vacuum prompts the collapse of the atonic postpartum uterus.

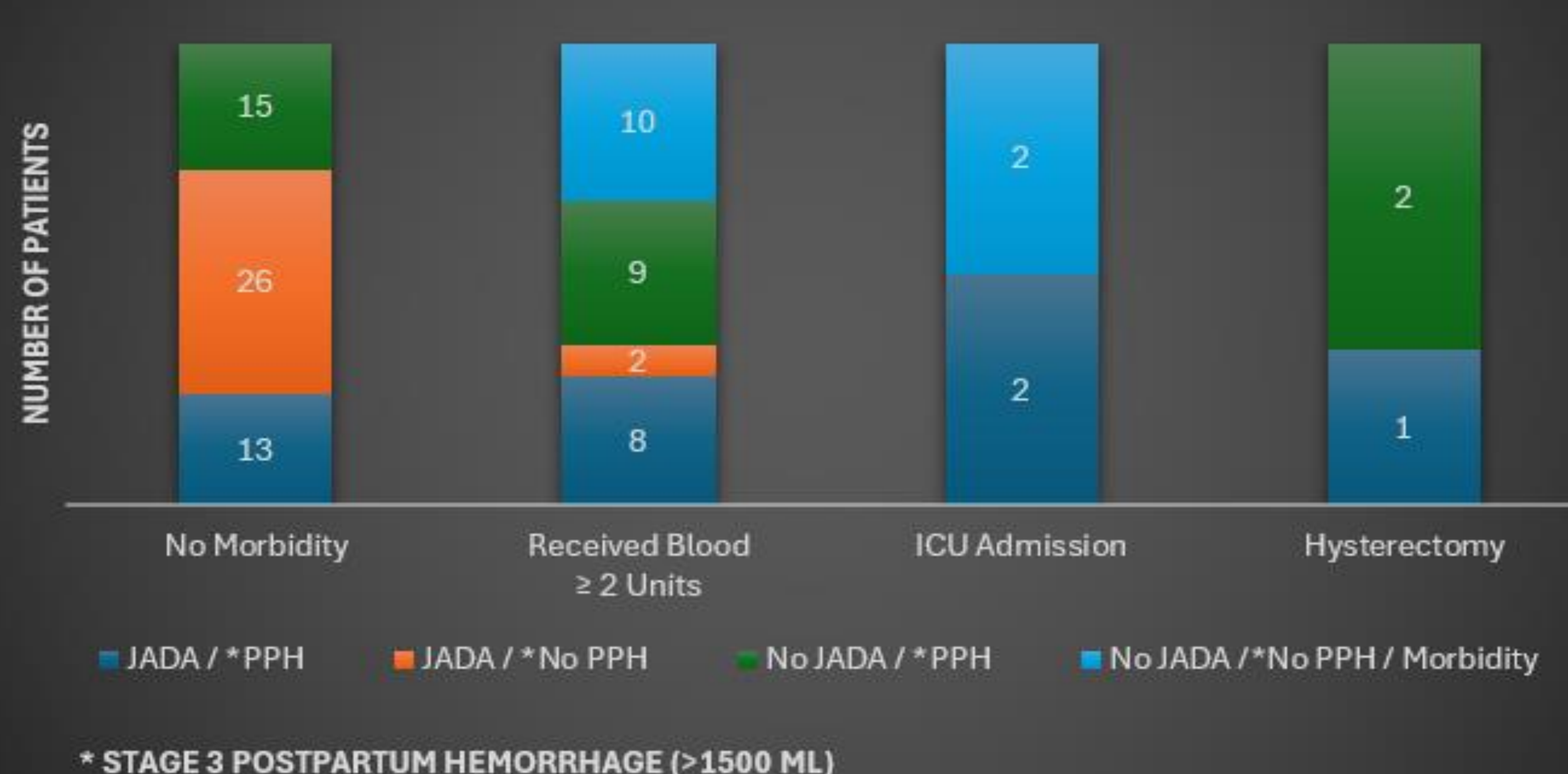
Contraction of the myometrium provides physiologic control of postpartum bleeding.

RESULTS

Timing of JADA Placement



JADA vs. No JADA Placement



LESSONS LEARNED

- 90 patients met inclusion criteria of JADA placement, Stage 3 PPH, or maternal morbidity (blood transfusion, ICU admission, or hysterectomy). 72 patients had JADA placed.
- 23 (32%) out of 72 patients with JADA placed within one hour post-delivery had no Stage 3 PPH or morbidity.
- 26 (36%) out of 72 patients with JADA placed had no Stage 3 PPH or morbidity.
- 10 (34%) out of 29 patients who received 2+ blood products had no JADA placed or Stage 3 PPH, potentially due to underestimation of blood loss.

Study limitations: Did not account for patient risk factors (previous cesarean, multiple gestation, elevated BMI) nor compare JADA to other PPH interventions.

NEXT STEPS

This retrospective chart review suggests early JADA placement within the first hour post-delivery may improve clinical outcomes. However, reliance on estimated blood loss could delay interventions, potentially increasing maternal morbidity. Further research comparing JADA to other PPH interventions and refining blood loss measurement to a quantitative approach could validate these findings and inform clinical practice.

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REFERENCES

