Mass General Brigham

General Anesthesia, Pain During Cesarean Delivery, and Patient Satisfaction: An Exploratory Study

Kerwin Wang BA, Kristina Nedeljkovic BS, Noor Raheel MBChB, MPH ,
Vesela Kovacheva MD, PhD, Lawrence Tsen MD, Michaela K. Farber MD, MS

BWH MGH 1811

INTRODUCTION

- Low rate of general anesthesia (GA) for cesarean delivery (CD) is a key quality metric:

  SOAP Centers of Excellence (COE) (≤ 5%)
- However, GA for Pain during CD (PDCD) may prevent traumatic recovery (e.g. postpartum depression, chronic pain)
- Low rates of GA for CD may negatively affect patient satisfaction, despite it often being a goal and quality metric

Hypothesis: Pain during cesarean and avoidance of GA are not consistently associated with negative patient experience, therefore low GA rates may not consistently reflect a positive quality measure.

Mass General Brigham

BWH MGH 1811

METHODS

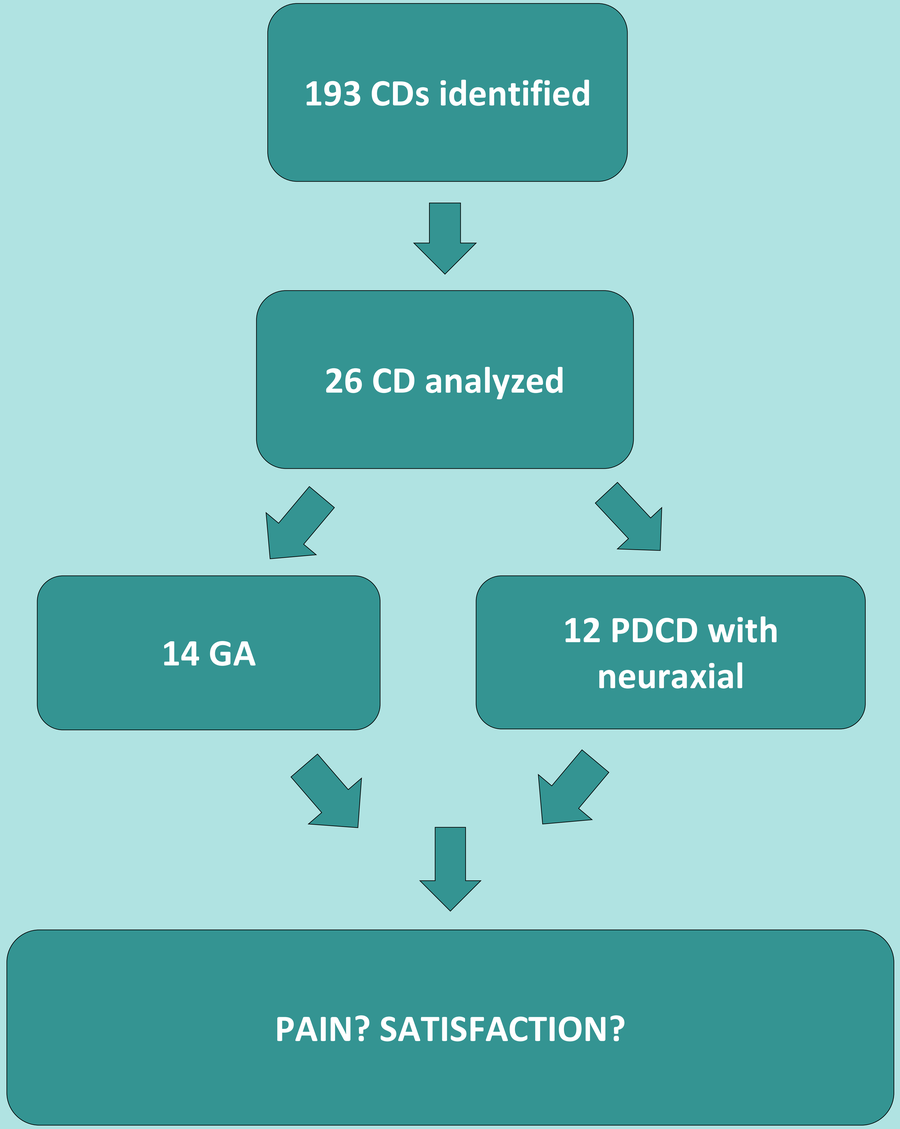
Quality improvement initiative

Patients undergoing CD at BWH, January–February 2024:

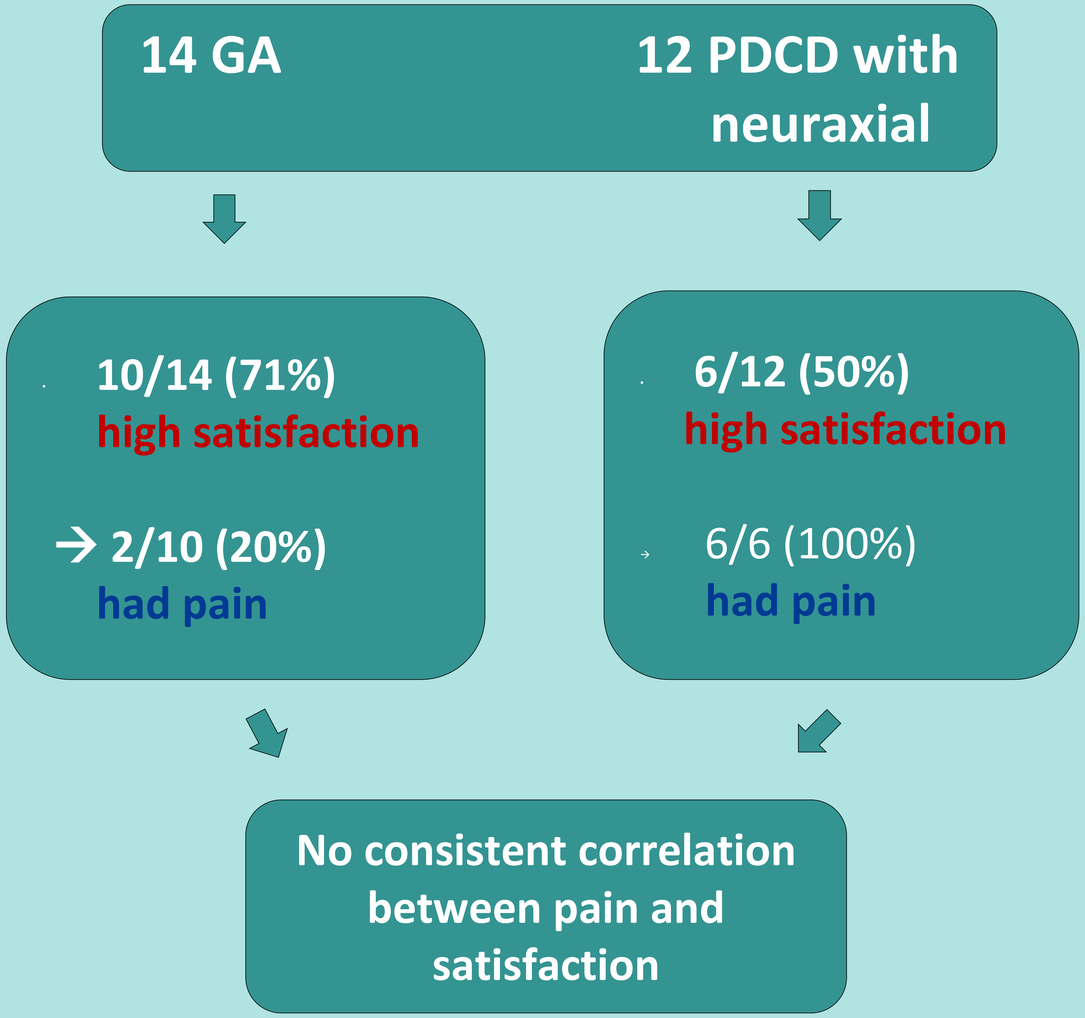
- Retrospective study
- Patients reporting **PDCD** on postpartum evaluation
- Patients who received **GA** for CD

Data Collection: Qualitative characteristics

- Clinical acuity: scheduled, urgent, emergent
- Indication for cesarean
- Sequence of anesthetics received
- Pain experienced in the operating room
- Postpartum satisfaction/well-being



RESULTS

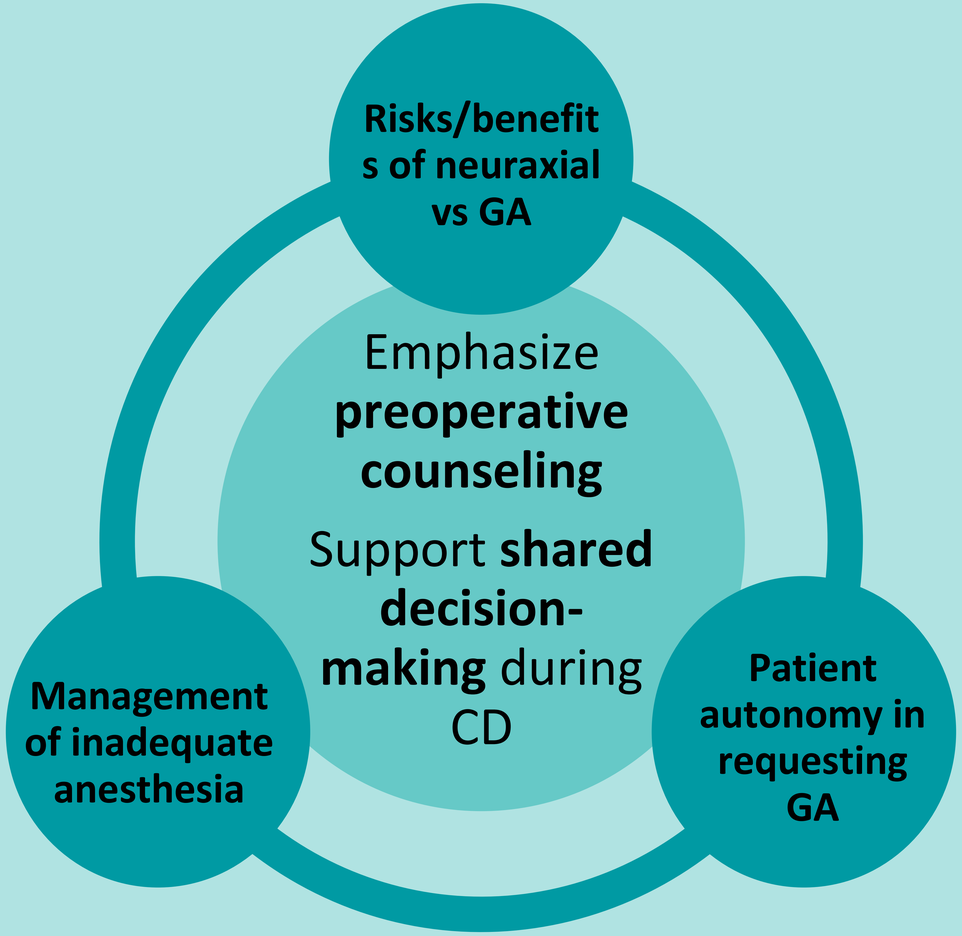


Presentation	Urgency	Anesthetic	Pain	Satisfaction
BLEEDING/COAGULOPATHY				
Hemorrhagic shock	Emergent	GA by need	No	Moderate
Placental abruption	Urgent	GA by request	No	High
HELLP, low platelets	Urgent; Coagulopathy	GA by need	No	High
Elective delivery for VTE hx	Scheduled	GA by need	No	High
Long labor, FTP with PPH	FTP CD/epidural failure	EPL,CSE, GA request	Pain	Moderate
Elective CD with PPH	Scheduled; repeat CD	Spinal, sedation	Pain	Moderate
OBSTETRIC EMERGENCIES				
PPROM, category 2 tracing	Urgent, patient choice	GA by request	No	Moderate
PPROM with decelerations	Emergent	GA by need	No	Moderate
NRFHT, PTL after MVA	Unscheduled CD	spinal	Pain	Moderate
Umbilical cord prolapse	Emergent	GA by need	No	High
Umbilical cord prolapse	Emergent	GA after failed EPL	No	High
PPROM twins, breech	Emergent	GA by need	No	High
PPROM twins Imminent Delivery	Emergent	GA by need	No	High
Frank breech ruptured meconium	Emergent	GA by need	No	High
Fetal bradycardia in labor	Emergent, epidural failure	Pre incision EPL to GA	Pain	High
PROM, breech presentation	Unscheduled CD	spinal	Pain	High
PPROM, NRFHT	Unscheduled CD	EPL	Pain	High
PROM, breech	Unscheduled CD	spinal	Pain	High
FAILURE TO PROGRESS IN LABOR				
Labor with malpresentation, adhesions	Unscheduled CD	Spinal, sedation	Pain	Low
Failed IOL	Unscheduled CD	CSE to EPL	Pain	Moderate
IOL, FTP in second stage	Unscheduled CD	EPL	Pain	Moderate
Failed IOL and oligohydramnios	Unscheduled CD	EPL	Pain	Moderate
SROM and early labor, FTP	Unscheduled CD/EPL failure	EPL, GA prior to incision	Pain	High
Pre-term labor, prior CD, decline TOLAC	Unscheduled repeat CD	spinal	Pain	High
IOL, Failure to progress in the first stage	Unscheduled CD	EPL	Pain	High
SROM, non-reassuring fetal heart tracing	Unscheduled, urgent	CSE	Pain	High

FINDINGS

- **Marked heterogeneity** by case type, urgency, management of PDCD, and patient satisfaction
- Conversion to GA associated with **specific clinical scenarios**

  i.e. nonfunctional labor epidural, prolonged surgery, major hemorrhage
- Patient satisfaction **varied independently of anesthetic modality**
- High satisfaction **remains present** in PDCD patients



Mass General Brigham

BWH MGH 1811

CONCLUSIONS

Patient satisfaction after PDCD does not correlate with use or avoidance of GA– suggesting that GA conversion may be both a positive and negative quality metric.

Non-pain factors (communication, effective management, share decision-making) drive patient satisfaction more than anesthetic modality.

GA rates alone are an inadequate quality metric

Recommendation: SOAP COEs minimum goals should report GA rates stratified by indication, excluding clinically justified decisions from negative quality metrics

Limitations

- Single-center study, small sample size

Future Directions

- Prospective studies
- Create comprehensive quality metrics
- Develop standardized PDCD tracking