



RETROSPECTIVE ANALYSIS OF THE
POTENTIAL EFFECTS, BOTH POSITIVE AND
NEGATIVE, OF REPLACING FENTANYL WITH
DEXMEDETOMIDINE (PRECEDEX) IN A LABOR
EPIDURAL ON PERIPARTUM AND
POSTPARTUM PAIN MANAGEMENT.

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INTRODUCTION / METHODS / RESULTS

- Introduction
 - Anesthesia trending away from the administration of opioids
 - Regional private practitioners already utilizing precedex in epidurals regularly instead of opioids had extremely promising results in patient pain and satisfaction
- Methods: Retrospective chart review
 - 184 laboring women who received labor epidurals from January 1, 2022 through April 30, 2022
 - 86 (47%) were identified as having received a labor epidural infusion containing precedex instead of the traditional fentanyl dose
 - Precedex dose was 100 mcg in a 200 ml bag of 0.2 percent Ropivacaine
 - 98 (53%) received a standard labor epidural infusion containing fentanyl dose
 - Fentanyl dose was 100 mcg in a 200 or 100 ml bag of 0.2 percent Ropivacaine
- Results
 - Among patients who received precedex, no significant differences were observed in estimated blood loss and APGAR scores.
 - Fentanyl supplementation was significantly lower among those who received precedex than those with no precedex ($p < 0.0001$).

DISCUSSION

- Clinical Implications
 - Improved pain control during the peripartum and postpartum period
 - Reduced need for additional opioids
 - Had no significant change in patients' vitals or increased need to convert to cesarean section
- Limitations
 - Precedex cost
 - Retrospective nature of this research project makes this study unblinded and nonrandomized which could have an influence on the results
- Future
 - Multi-institutional study to determine precedex dosing

Citations:

Cheng Q, Bi X, Zhang W, Lu Y, Tian H. Dexmedetomidine versus sufentanil with high- or low-concentration ropivacaine for labor epidural analgesia: A randomized trial. J Obstet Gynaecol Res. 2019 Nov;45(11):2193-2201. doi: 10.1111/jog.14104. Epub 2019 Sep 9. PMID: 31502323.

Zhao Y, Xin Y, Liu Y, Yi X, Liu Y. Effect of Epidural Dexmedetomidine Combined With Ropivacaine in Labor Analgesia: A Randomized Double-Blinded Controlled Study. Clin J Pain. 2017 Apr;33(4):319-324. doi: 10.1097/AJP.0000000000000411. PMID: 27513640.