

## **ABSTRACT TITLE:** NARCOTIC FREE CESAREAN SECTION

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**BACKGROUND:** Cesarean delivery is the most common in-patient surgery performed in the United States. Opioids are frequently prescribed post-operatively, which can lead to misuse or even illegal distribution.

Until recently there has been little interest in enhanced recovery after Cesarean Section. However, because multiple obstetrical units in the United Kingdom, that introduced enhanced recovery programs in 2012, demonstrated improved quality of care and significant savings with superior patient satisfaction, U.S. physicians have become more receptive to the concept. Our partnership with leading experts from the Royal Hallamshire Hospital in the United Kingdom provided us with the unique opportunity to pioneer this pathway in the United States.

**METHODS:** Our ERAS pathway standardized post-operative management with intrathecal morphine, scheduled Ketorolac and Ofirmev for the first 24 hours intravenously. To further reduce opioid consumption we infiltrated liposomal bupivacaine at the time of fascial closure of a Pfannenstiel incision, after delivery and repair of the hysterotomy. An 80cc solution was divided into four infiltrates of 5cc of Liposomal Bupivacaine, 6cc of .5% Bupivacaine and 9cc of Normal Saline each. Half of the solution was injected laterally under the fascia and the remaining was distributed evenly subcutaneously. Scheduled PO ibuprofen and acetaminophen were continued for forty-eight hours postoperatively. Oxycodone was ordered as needed but no scheduled opioids were ordered. Mean morphine equivalents were used to compare narcotic ingestion.

**RRESULTS:** We used a patient engagement application to engage our patient population and collect data on pain levels, narcotic use and patient satisfaction. We reviewed in-patient charts and out-patient EMR records post-operatively for two weeks.

Of the 11 cases, 5 patients used no narcotics, and 1 outlier was identified as a potential abuser. The mean morphine equivalent was 7.5mg or one 5mg oxycodone during the in hospital period. This represents an 87% reduction in opioid use compared to our traditional pathway (59 mg morphine equivalent) and a 76% reduction in opioid use compared to our ERAS pathway (31 mg morphine equivalent). The average length of stay was 2.2 days. The response rate was 42% to patient satisfaction questions.

**CONCLUSION:** Liposomal Bupivacaine reduces opioid use in the post-operative time period for cesarean section. It increased patient satisfaction and improved pain control, shortening length of stay. Further randomized control studies to determine the best delivery method are warranted. Multimodal analgesia combined with a long acting local anesthetic may lead to narcotic free Cesarean Section.