

## Introduction of the Quadratus Lumborum Block to Decrease Opioid Usage in Patients with a Substance Use Disorder

Peggy Farrell, MSN RN NE-BC

Kristin Yates, MSN RNC-MNN Patricia Stratelak, CRNA

Sue Fulara MSN, RNC-OB, NE-BC

Karen Moore RNC-OB, MA BS

Dr. Paul Terna, Anesthesiologist

# AND INFANT SERVICES HEALTH®

ALEXIAN BROTHERS

MEDICAL CENTER WOMAN

#### Problem

- AMITA Alexian Brothers Medical Center has approximately 1,800 births each year.
- With the evidenced rise in opioid usage, our goal is to decrease the need for opioid use by providing an alternative analgesia option for all patients.
- When speaking with patients with substance use disorder (SUD) they fear that their pain will not be controlled during delivery as well as in the postpartum period and want to know what pain relief options are available for them, aside from opioids.
- Our Quality Improvement team is comprised of Patricia Stratelak, CRNA, Dr. Paul Terna, Anesthesiologist, Peggy Farrell, Mother Baby/SCN Educator, Kristin Yates, Labor & Delivery Educator, Sue Fulara, Manager of Women and Infant Services, Mary Tillema, Neonatology, and Karen Moore, Director of Women and Infant Services.

### Project Implementation

- An In-service has been provided to the anesthesia department regarding administration of the Quadratus Lumborum (QL) Block
- A specialized ultrasound machine for placement has been purchased
- OB providers will be informed of this pain relief option and benefits
- Nursing staff will be educated on the process and benefits of QL Blocks
- Retrospective baseline data will be collected on opioid usage in the postpartum period by patients that receive a QL Block to include:
- Time of first Opioid
- Opioid consumption at 24 hours and 48 hours
- Patient Pain scores
- Side Effects experienced
- At this time the QL Block has been used successfully on 1 cesarean section patient.

#### What is it:

- A Quadratus Lumborum Block is performed with ultrasound guidance and is considered an extension of the transversus abdominis plane (TAP) block; it is a regional anesthetic techniques in which local anesthetic is injected adjacent to the quadratus lumborum muscle.
  - Alleviates somatic pain
  - Inhibits visceral pain
  - The mechanism of action is unknown but it is thought that the relief is gained from the spread of analgesia along the TLF and the endothoracic fascia into the paravertebral space.
  - Long-lasting pain relief compared with TAP Block

#### Why is it being implemented:

- To Decrease Opioid use and help to maintain pain after cesarean section
- Maintain postoperative pain relief which will:
  - Increase patient satisfaction
  - Encourage early and frequent postoperative ambulation
  - Support breastfeeding practices
  - Support mother-infant bonding
  - Support Eat Sleep Console
  - Use of non-opioid medication decreases worries of maintaining sobriety

Table 1. Insert 1-2 data tables displaying your hospital's QI progress

Data to be collected

Figure 1. Insert 1-2 data figures displaying your hospital's QI progress or Insert Hospital QI tool used to drive change

Opioid Consumption at 24 hours	TIME	Side effects/Comments	Pain score	Opioid Consumption at 48 hours	TIME	Pain score	Side effects/Con
81 24 110013				at 40 Hours			
					<u> </u>	I	
Comment	ts:						

#### Conclusions

Fear of pain is one of the big concerns for maternal patients soon to deliver with a history of SUD. We discovered this as part of our pre-delivery discussions with patients, and now we include key anesthesia providers in the meeting to discuss alternative choices. This has never been a focus for us before the MNO project. During debriefs of previous cases, in each one of those, pain of the mother was always something we discovered we could improve on. This is now our next step in our journey of caring for SUD patients, to take a closer look, collect and analyze the data and outcomes focusing on pain management and effective ways in which to management pain. This will improve the overall outlook and well-being of the patient in caring for herself and newborn.

## Acknowledgements/Hospital Team

The implementation of this initiative will not be possible without the continued encouragement, education and support from our anesthesia team. Our anesthesia team takes an active role in educating patients affected by SUD about pain control options for their deliveries, which has been identified as a primary concern for these patients.