**A Perioperative Pain Management Strategy for Elective Cesarean Section in a Patient on Chronic Buprenorphine/Naloxone Therapy**

**Abstract**

**Objective:** To describe a perioperative pain management strategy for a parturient on chronic Buprenorphine HCl/Naloxone therapy undergoing elective cesarean section.

Perioperative pain management in opioid dependent parturients is often challenging. The mother's pain control, emotional well being, and fetal considerations including apnea and withdrawal must be considered. Parturients on chronic opioids often report higher pain scores and opioid requirements throughout pregnancy and delivery. buprenorphine/naloxone (Bup/Nal) is gaining acceptance for use in opioid dependent parturients due to its improved safety profile for the neonate. Four common misconceptions encountered in patients on opioid agonist therapy (OAT) described in the literature include: 1) maintenance OAT provides pain relief; 2) risk of addiction relapse if opioids are used for analgesia; 3) additive effects of opioid analgesics and OAT may cause respiratory and central nervous system depression; 4) pain complaints may be a manipulative behavior to obtain opioid medications.

Our patient is a G7P1 32 year old 38 week parturient with a history of fibromyalgia, anxiety, depression, history of opioid addiction, and chronic lumbar and cervical spine pain on a total sublingual dose of 38 mg of Bup/Nal presented for elective cesarean section. Her concerns were fear of pain during the perioperative period and the possibility of opioid addiction relapse. The patient’s (Bup/Nal) therapy was continued throughout her hospitalization. A combined spinal (1.5 ml of 0.75% bupivacaine with 20 µg of fentanyl)/epidural (0.0625% bupivacaine at a rate of 10ml/hr) was used for intraoperative management and post-operative pain control respectively. An intravenous fentanyl PCA was started for breakthrough pain control. On post-operative day #1 the epidural was discontinued and her daily dose of intravenous fentanyl was calculated and converted to a transdermal patch with oral oxycodone/APAP available for breakthrough pain. The patient’s pain was moderately controlled and her transdermal fentanyl was titrated gradually to patient satisfaction. The patient was discharged on post op day #3 on transdermal fentanyl, oxycodone/APAP, and Bup/Nal with excellent pain relief. Outpatient follow up with her pain management specialist was coordinated.

Many factors must be taken into account when providing pain relief for parturients on chronic pain medications. We found no defined protocols for the perioperative pain management of parturients on partial agonist/antagonists undergoing cesarean section, and to date this is the first case report of a strategy involving Bup/Nal therapy. Although our patient did well, the lack of consensus regarding the best strategy for this patient population illustrates the need for further research in this area.

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