Obstetrics Pain Management

Infosheet – Management of Persistent Pain After Cesarean Section

B|BRAUN SHARING EXPERTISE

Persistent postoperative pain after a cesarean section occurs frequently and impairs maternal quality of life. A multimodal analgesic approach in the pre-, intra- and postoperative phases offers an effective strategy to reduce this burden.

Persistent pain after cesarean section: an underrecognized complication

Cesarean section is the most frequently performed surgical procedure worldwide — and it is also **among the most painful** (1). More than half of women (53.9 %) undergoing the procedure reported severe pain, and the majority (82.2 %) reported at least moderate pain, with direct consequences for mood, mobility, sleep, and breathing (2). It may further delay recovery and impair mother-child bonding and breastfeeding (3). Inadequate postoperative pain relief may lead to hyperalgesia and persistent postoperative pain (3, 4).

For a substantial number of mothers, the pain does not end with discharge. Chronic post-surgical pain (CPSP) — defined as pain continuing beyond three months after surgery — affects approximately 16.7 % of women at three to six months following a cesarean delivery, with around 9 % still experiencing pain at twelve months and beyond (5) - a persistent issue that remains largely under-recognized.

Risk factors for CPSP arise across the full perioperative period (6), but severe acute postoperative pain is the most important modifiable one, with affected women carrying almost three times the risk of progression to chronic pain compared to those with well-controlled pain (4, 7). Effective pain management is therefore not merely a comfort measure — it is a preventive intervention.

53.9 % of women report severe pain after C-section (2)

Consequences of persistent pain: beyond the surgical scar

For a mother recovering from a cesarean section, persistent pain shapes every aspect of the postpartum period — the ability to move, to sleep, to work, and most importantly, to care for a newborn. The negative impact on quality of life is greatest when neuropathic symptoms are present (4). Chronic pelvic pain occurs in more than 40% of women with CPSP, with implications for intimate relationships and long-term wellbeing that can persist for years postpartum (4).

Many women with CPSP after a cesarean section receive no analgesic treatment at all — often due to concerns about medication safety during breastfeeding (2, 4). Yet undertreated acute pain carries consequences beyond persistent pain alone: severe acute postoperative pain is independently associated with an increased risk of postpartum depression (PPD), and hyperalgesia triggered by uncontrolled pain may amplify this risk (8, 9, 10). The risk factor profile for both CPSP and PPD substantially overlaps — preoperative anxiety, depression, and a heightened psychological response to pain all increase the risk of chronification, creating a cycle that adequate perioperative pain management can interrupt (3, 5, 7).

82.2 % of women experience at least moderate postoperative pain (2)

Multimodal pain relief: a structured approach to prevention

Preventing acute pain from becoming persistent requires addressing all phases of care — before, during, and after the surgery. The 2026 PROSPECT guidelines for an elective cesarean section provide an evidence-based framework for achieving this, recommending a combination of analgesic techniques to manage pain safely and effectively (3).

Neuraxial analgesia — including spinal, epidural, and combined spinal-epidural (CSE) techniques — is the foundation of pain management in cesarean section, offering reliable and effective pain control that can be adapted to the clinical situation and the needs of the patient (3). Where appropriate, adding an intrathecal opioid extends postoperative pain relief within this framework.

When long acting neuraxial opioids are not used, fascial plane and abdominal wall blocks are effective alternatives (3). Where regional techniques are not available, wound infiltration with local anesthetic is a practical option. Alongside these techniques, scheduled systemic non-opioid analgesia supports pain control, reducing pain intensity and the need for opioids (3), reducing opioid-related side effects.

Post-cesarean pain is common, and perioperative multimodal analgesia is associated with improved recovery and a lower risk of persistent pain.

The message is clear: a single technique is not sufficient. It is the combination — neuraxial analgesia, regional blocks where indicated and scheduled non-opioid analgesia — that best protects against both acute pain and its progression to chronic pain. Making this approach standard practice means better outcomes for mothers and their newborns.

Sources:

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