

# Introduction

Safe and pain free child birth is a dream for the future rather than a reality today. The ideal procedure to relieve pain should:

- Produce efficient relief from pain with consciousness between pain and good cooperation from the patient.
- Not depress the respiration of the fetus.
- Not depress the uterus causing prolonged labor.
- Be non toxic .
- Be safe for mother and child.

Opiates administered intravenously or intramuscularly to parturients, introduce potential side effects, including respiratory depression, nausea and vomiting, orthostatic hypotension, delayed gastric motility and emptying, diminished uterine activity (if administered during early labor) and placental transfer of the drug resulting in neonatal respiratory depression. All these side effects are dose-related and some may be avoided by reducing dose. If Intrathecal opiates provide safe and effective analgesia for labor, this technique would offer distinct advantages over current analgesic methods.

Intrathecal opioid is an attractive alternative method of analgesia for the relief of labour pain. Also, intrathecal opioids for labour analgesia leads to decrease in circulating epinephrine concentrations in the laboring parturient, which is probably due to pain relief and, thus, a reduction in maternal stress. (*Lascis et al., 1997*).

Intrathecal opioids is used as apart of combined spinal-epidural techniques. The rapid onset of analgesia is one of the major advantages of combined spinal -epidural analgesia and is associated with increased maternal satisfaction (*Collis ER et al., 1995*)

Initiation of epidural analgesia is often delayed until labour is well advanced for fear that the motor block and concomitant bed rest may slow or arrest the labor pattern (*Albers LL et al., 1997*).

There are data to suggest that the initiation of early epidural analgesia (3-5cm cervical dilatation versus 5cm) with dilute local anesthetics may not adversely affect the rate of operative delivery (*Chenut DT et al., 1994*). However, the aversion to the possibility of a motor block and the belief that ambulation may facilitate the early phase of labor (*Albers LL et al., 1997*) has contributed to the growing popularity of IT opioids using the combined spinal -epidural technique. Studies of this technique have used sufentanil, with the most popular dose being 10µg. Which provides excellent analgesia and virtually no motor block (*Herman NL et al., 1997*).