

## Comparative Study Between Two Different Techniques for Postoperative Analgesia in Cesarean Section Delivery

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**Abstract :** Introduction: Adequate postoperative analgesia after caesarean section (CS) is crucial as it impacts the distinct surgical recovery needs of the parturient. Over recent years, there has been increased interest in regional nerve block techniques with promising results on efficacy. These techniques reduce the need for additional analgesia, thereby lowering the incidence of drug-related side effects. As postoperative pain after cesarean is mainly due to abdominal incision, the transverses abdomenis plane ( TAP ) block is a relatively new abdominal nerve block with excellent efficacy after different abdominal surgeries, including cesarean section. Objective: The main objective is to compare ultrasound-guided TAP block provided by the anesthesiologist with TAP provided by the surgeon through a caesarean incision regarding the duration of postoperative analgesia, intensity of analgesia, timing of mobilization, and easiness of the procedure. Method: Ninety pregnant females at term who were scheduled for delivery by elective cesarean section were randomly distributed into two groups. The first group (45) received spinal anesthesia and postoperative ultrasound guided TAP block using 20ml on each side of 0.25% bupivacaine which was provided by the anesthesiologist. The second group (45) received spinal anesthesia plus a TAP block using 20ml on each side of 0.25% bupivacaine, which was provided by the surgeon through the cesarean incision. Visual Analogue Scale (VAS) was used for the comparison between the two groups. Results: VAS score after four hours was higher among the TAP block group provided by the surgeon through the surgical incision than the postoperative analgesic profile using ultrasound-guided TAP block provided by the anesthesiologist ( $P=0.011$ ). On the contrary, there was no statistical difference in the patient's dose of analgesia after four hours of the TAP block ( $P=0.228$ ). Conclusion: TAP block provided through the surgical incision is safe and enhances early patient's mobilization.

**Keywords :** TAP block, CS, VAS, analgesia

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