

A COMPARATIVE STUDY OF ULTRASOUND GUIDED TRANSVERSUS ABDOMINIS PLANE (TAP) BLOCK VERSUS SPINAL ANAESTHESIA FOR INGUINAL HERNIA REPAIR IN ADULTS

ABSTRACT

Background : Inguinal hernia is one of the most commonly performed surgeries worldwide. A wide variety of anaesthetic techniques have been used for inguinal hernia repair such as local anaesthesia, spinal/epidural anaesthesia and general anaesthesia.

Objectives : To evaluate the efficacy of ultrasound guided Transversus Abdominis Plane (TAP) block versus Spinal Anaesthesia in terms of adequate anaesthesia, post – operative analgesia, adverse effects and recovery.

Materials and methods : This study comprised of 100 cases of uncomplicated inguinal hernia repair with ASA class I and II in the age group of 20-45 years, which were randomly divided into two groups of 50 each named group A and group B. Group A was given Spinal Anaesthesia and group B was given Ultrasound guided Transversus Abdominis Plane block. The parameters such as time of onset, achievement of surgical anaesthesia, dermatome level, motor block, mean arterial pressure, post-operative VAS score, side effects and recovery were

recorded in both the groups. Data was compiled and subjected to statistical analysis.

Results : All the patients were explained about both the methods of anaesthesia. Time taken to perform the procedure and for achievement of surgical anaesthesia was more with Ultrasound guided Transversus Abdominis Plane block. Success rate was more with spinal anaesthesia(100 %) compared to TAP block (84 %). Post-op VAS scores both at rest and during movement were lower in TAP block group compared to spinal anaesthesia, which was statistically significant. Post –op complications like nausea, vomiting, headache and urinary retention were significant in spinal anaesthesia. Time for ambulation was lower in TAP block group ($P < 0.05$), which was highly significant.

Conclusion : The Transversus Abdominis Plane block may be considered as an effective alternative to Spinal Anaesthesia in terms of hemodynamic stability, post – operative analgesia, lesser complications and early ambulation.

Key words: Spinal Anaesthesia, Inguinal hernia, Transversus Abdominis Plane block, Ultrasound.