COMPARATIVE STUDY OF ULTRASOUND ASSISTED VERSES CONVENTIONAL SURFACE LANDMARK GUIDED TECHNIQUE FOR COMBINED SPINAL EPIDURAL PLACEMENT IN DIFFICULT SURFACE ANATOMY OF LOWER BACK: A PROSPECTIVE RANDOMISED CONTROL TRIAL

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Background and Aims Background: To establish the puncture point for Combined Spinal Epidural (CSE) via conventional surface landmark assisted technique may be difficult in patients with obesity, degenerative spinal diseases and kyphoscoliosis, large prick numbers. The study to compares the success rate of placement of CSE via midline approach in first attempt of needle puncture in patients with difficult surface anatomy of lower back between surface landmark assisted group (SLG) and ultrasound assisted groups (USG).

Methods Method: Randomized prospective study done with sample size (n=50) each in the two groups SLG and USG. In USG vertebral space was scanned preoperatively and puncture point marked and in SLG puncture point was assessed by palpation of the surface landmarks. CSE was performed, efficacy of motor and sensory block was assessed. Primary outcome measured in the form of successful placement of CSE in first attempt of needle puncture.

Results Result: CSE was placed successfully in first attempt in 30 patients of SLG group and 46 patients of USG group with significant p value of 0.0003. Time taken for establishing surface landmark was 1.45±.47 minutes in USG group and 0.79±.34 minutes in SLG group with p value of <.001

Conclusions Conclusion: The use of ultrasound to mark the needle insertion point by assessing spinal anatomy for central neuraxial block increases the success rate of CSE in first attempt of needle insertion as compared to traditional surface landmark guided technique in patients with difficult surface anatomy of lower back. Other significant outcomes still to be describe.

Abstract EP096 Figure 2 On of the images showing posterior complex and technique to measure

Abstract EP096 Figure 3 Midline determined by spinous process

Abstract EP096 Figure 1 scanning and marking of back

ePoster session 3 – Station 5

A RADIOLOGIC AND ANATOMIC ASSESSMENT OF SPREAD OF INJECTATE USING TWO DIFFERENT MECHANICAL INFUSION PUMPS

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Abstract EP097 Figure 1 Scanning and marking of back