

### 138. Evaluation of two different regimens used for spinal anaesthesia for the tension-free vaginal tape procedure

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The aim of this study was to compare two different regimens used for spinal anaesthesia, with regard to their effect on the patients' ability to cough effectively during the tension-free vaginal tape (TVT) procedure.

**Method:** 33 patients were randomized to receive either 8mg Levobupivacaine 0.5% combined with 0.02mg fentanyl (group A, n=18), or 8mg Ropivacaine 0.75% combined with 0.02mg fentanyl (group B, n=15). We evaluated the patients' ability to cough effectively using the cough stress test. Cough test was performed before and after the onset of spinal anaesthesia by measuring the volume of leakage in a scale (1-3), after administration of 250ml normal saline in bladder. We recorded the patients' haemodynamic status just before and during anaesthesia. We also recorded maximal dermatomal sensory block level and maximal motor block achieved, as well as the time required for the achievement of these purposes. Data were analyzed using students' t-test and the repeated measures analysis of variance.

**Results:** There were no statistically significant differences in the haemodynamic data during anaesthesia between the two groups. Maximal dermatomal sensory block level achieved in group A was T12 (T10,S1) and T10 (T10,T10) in group B ( $p<0.001$ ). Time required for the onset of maximal sensory block level after administration of the local anaesthetic was  $18.1\pm 5.5$ min in group A and  $10.2\pm 1.8$ min in group B ( $p<0.001$ ). Both regimens did not impair the cough test, although they produced a maximal Bromage motor score II. Duration of this motor blockade was  $116.3\pm 8.1$ min and  $102\pm 7$ min in groups A and B respectively ( $p<0.001$ ).

**Conclusion:** Both regimens studied produced an effective and safe anaesthesia. In addition, they did not impair the patients' ability to cough effectively during surgery, when this was necessary for the adjustment of tape tension.

### 144. Comparison of intrathecal ropivacaine with levobupivacaine for total hip replacement

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**Background:** Ropivacaine 5mg/ml provides effective spinal anaesthesia for total hip arthroplasty. The purpose of our study was to compare the efficacy and safety of plain ropivacaine with levobupivacaine for spinal anaesthesia in patients undergoing total hip replacement.

**Methods:** Sixty patients, ASA I-III, were randomized to receive an intrathecal injection of one of two local anaesthetic solutions. Group R (n=30) received 3.5 ml of ropivacaine 5mg/ml (17.5 mg). Group L (n=30) received 3ml levobupivacaine + 0.5 ml N/S (15 mg). Spinal anaesthesia was administered with a 22-gauge Quinke needle, at the L2-L3 or L3-L4 interspace with the patients in the sitting position. The following were recorded: onset of motor block (with modified Bromage scale), onset of sensory block (thermal method with cold alcohol swab), duration of motor block (Bromage 1), complete analgesia (time to first feeling of pain), duration of the arthroplasty, the haemodynamic changes and the necessity of vasospastic and anticholinergic drugs.

**Results:** Onset of motor block was similar in both of groups. The median time of onset of motor block was in Group R (3,43 min) and in Group L (3,50 min). The median time of sensory block was shorter for Group L (1,61min) versus Group R (2,08 min). The median duration of complete motor block was in Group R (231,25 min) versus Group L (231 min). The median duration of sensory block was in Group R (338,60 min) and in Group L (342,27 min). The wants of vasospastic drugs was 15% for Group R and 40% for Group L.

**Conclusions:** Intrathecal administration of either 17.5mg ropivacaine or 15mg levobupivacaine was well tolerated and an adequate block for total hip replacement was achieved in all patients. The intraoperative behavior of the ropivacaine 5mg/ml was much better with less haemodynamic changes (mean blood pressure and heart rate) and fewer wants of vasospastic and anticholinergic drugs.