Effect of Oral Clonidine Premedication on Subarachnoid Block Characteristics of 0.5 % Hyperbaric Bupivacaine for Laparoscopic Gynecological Procedures - A Randomized Control Study

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Abstract: Background- Clonidine, α 2 agonist, possesses several properties to make it valuable adjuvant for spinal anesthesia. The study was aimed to evaluate the clinical effects of oral clonidine premedication for laparoscopic gynecological procedures under subarachnoid block. Patients and method- Sixtyfour adult female patients of ASA physical status I and II, aged 25 to 45 years and scheduled for laparoscopic gynecological procedures under the subarachnoid block, were randomized into two comparable equal groups of 32 patients each to received either oral clonidine, 100 μ g (Group I) or placebo (Group II), 90 minutes before the procedure. Subarachnoid block was established with of 3.5 ml of 0.5% hyperbaric bupivacaine in all patients. Onset and duration of sensory and motor block, maximum cephalad level, and the regression time to reach S1 sensory level were assessed as primary end points. Sedation, hemodynamic variability, and respiratory depression or any other side effects were evaluated as secondary outcomes. Results- The demographic profile was comparable. The intraoperative hemodynamic parameters showed significant differences between groups. Oral clonidine was accelerated the onset time of sensory and motor blockade and extended the duration of sensory block (216.4 \pm 23.3 min versus 165 \pm 37.2 min, P <0.05). The duration of motor block showed no significant difference. The sedation score was more than 2 in the clonidine group as compared to the control group. Conclusion- Oral clonidine premedication has extended the duration of sensory analgesia with arousable sedation. It also prevented the post spinal shivering of the subarachnoid block.

Keywords: oral clonidine, subarachnoid block, sensory analgesia, laparoscopic gynaecological **Conference Title:** ICSAT 2022: International Conference on Surgery, Anesthesiology and Trauma

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