Intrathecal Fentanyl with 0.5% Bupivacaine Heavy in Chronic Opium Abusers

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Abstract: Chronic use of opioids in opium abusers can cause poor pain control and increased analgesic requirement. We compared the duration of spinal anaesthesia in chronic opium abusers and non-abusers. This prospective randomised study included 60 American Society of Anesthesiologists (ASA) Grade I or II adults undergoing surgery under spinal anaesthesia with 10 mg bupivacaine, and 25 μg fentanyl in non-opium abusers (Group A); and chronic opium abusers (Group B), and 40 μg fentanyl in chronic opium abusers (Group C). Patients were assessed for onset and duration of sensory and motor blockade and duration of effective analgesia. Mean time to onset of adequate analgesia in opium abusers was significantly longer in chronic opium abusers than in opium-naive patients. The duration of sensory block and motor block was significantly less in chronic opium abusers than in non-opium abusers. Duration of effective analgesia in groups A, B and C was 255.55 ± 26.84, 217.85 ± 15.15, and 268.20 ± 18.25 minutes, respectively; this difference was statistically significant. In chronic opium abusers, the duration of spinal anaesthesia is significantly shorter than that in opium nonabusers. The duration of spinal anaesthesia with bupivacaine and fentanyl in chronic opium abusers can be improved by increasing the intrathecal fentanyl dose from 25 μg to 40 μg.

Keywords: bupivacaine, chronic opium abusers, fentanyl, intrathecal

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