

Prolongation of Bupivacaine Spinal Anesthesia by Oral Clonidine

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We studied the effect of oral clonidine on the duration of bupivacaine spinal anesthesia. Forty ASA I-II, aged 15-50 year patients undergoing lower extremities surgery were studied by prospective randomized, double blind, placebo-controlled method. The patients were divided into two groups. All patients received intravenous acetar 8 ml/kg before spinal anesthesia with 2.5 ml of 0.5% heavy bupivacaine. One hour before anesthesia group I (n=20) received placebo ; group II (n=20) received 0.15 mg of oral clonidine.

The times for two segment regression were 78.29 ± 3.65 and 104.08 ± 2.62 min in group 1 and 2, respectively. The times for four segment regression were 117.75 ± 8.81 and 158.25 ± 7.66 in group 1 and 2, respectively. All the regression times in group 2 were significantly longer than those in group 1 ($p < 0.001$). The times to maximal level of sensory blockade in group 1 were 15.25 ± 2.55 and was not different in group 2, 13.75 ± 3.58 min. The number of patients requiring aramine and atropine were similar in both groups.

We conclude the 0.15 mg of oral clonidine prolongs the duration of sensory blockade of spinal anesthesia with 2.5 ml of 0.5% heavy bupivacaine about 30% but does shorten the onset time and has no different effect of the hemodynamic when compare to the control group.