COMPARISON OF HEMODINAMIC EFFECTS OF IQB-9302 AND BUPIVACAINE IN ANAESTHETIZED RATS.

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Most local anaesthetics cause vasodilation of peripheral blood vessels. IQB-9302 is a new local anaesthetic. In the present study we describe its hemodynamic effects in rats. Experiments were performed on 16 rats of either sex, weighting 250-350 g. First, anaesthesia was induced with intraperitoneal sodium pentobarbital (70mg/kg). One catheter was then inserted into the femoral vein and another into the femoral artery. Mean arterial presure (MAP) and heart rate (HR) were recorded on MacLab 4e. Each animal received increasing doses of 0.1, 0.3, 1, 3 and 10 mg/kg Bupivacaine or IQB-9302, at 20 minutes intervals. We detected a MAP increase following 0.3, 1 and 3 mg/kg. This increase was higher in animals treated with IQB-9302 than Bupivacaine group, although the differences were not statistically significant. No significant changes in HR were observed. All rats died between 1 or 2 minutes after 10 mg/kg dose administration. We conclude IQB-9302 seems to induce less vasodilatory effects than Bupivacaine because it produces a higher increase in MAP and a similar decrease in HR.