ABSTRACT

AIM:

To evaluate the duration of analgesia of bupivacaine with fentanyl versus bupivacaine during with magnesium sulphate during spinal anaesthesia for infraumbilical surgeries.

MATERIALS AND METHODS:

The study was carried out in department of anaesthesiology, ESICMC PGIMSR, Chennai. A total of 70 patients included in the study during June 2016 to May 2017. These patients were randomly divided into two groups.

METHODOLOGY:

Group A received 3 ml of 0.5 % hyperbaric bupivacaine and 0.5 ml of 25 mcg of fentanyl. Group B received 3 ml of 0.5 % hyperbaric bupivacaine and 100 mg of magnesium sulphate. They onset of sensory and motor blockade, duration of sensory and motor blockade, duration of analgesia and incidence of side effects such as pruritus, sedation, hypotension and bradycardia.
RESULTS:

Addition of magnesium sulphate delayed the onset of sensory and motor blockade without prolonging the duration of sensory and motor blockade as fentanyl. Duration of analgesia was comparable in both groups. Incidence of side effects was more in fentanyl group.

CONCLUSION:

Thus, we conclude that addition of 100 mg magnesium sulphate to 0.5 % hyperbaric bupivacaine intrathecally, delayed the onset of sensory and motor blockade, when compared to addition of fentanyl. Further, addition of magnesium sulphate at dose of 100 mg prolongs the duration of analgesia to the same extent as fentanyl with stable hemodynamic profile and lesser side effects when compared to fentanyl.

KEY WORDS: magnesium sulphate, fentanyl, bupivacaine, analgesia.