

ABSTRACT

Background and Objectives

This study was conducted to compare the efficacy and advantages of 0.25% Bupivacaine and 0.375% Ropivacaine for field block in inguinal hernia repair.

Aim :

A prospective randomized double blinded study.

Methods:

Study was conducted on 60 patients posted for elective inguinal hernia repair. They were divided into 2 groups – Bupivacaine and Ropivacaine. Field block was instituted with mean volume of 35ml to block ilioinguinal, iliohypogastric, genital branch of genitofemoral nerve. Patients were observed for onset, adequacy, duration of post-operative analgesia and side effects. Onset of block is assessed by pin prick test. Pain was assessed by the visual analog scale(VAS). Adequacy of block was judged by the need for supplementary analgesia. At the end of surgery, Post operative pain score was assessed by Verbal Rating Score (VRS). Rescue analgesia were given when needed.

Results

The onset of blockade is quicker in Bupivacaine (5.6min) whereas Ropivacaine takes longer (11.3min). With local infiltration at the neck of the sac , 13.3% patients were graded in mild pain in both groups. With inadequate analgesia, some needed narcotic supplementation and fall into moderate pain, 13.3% in B group and 16.7 % in R group. Block failure patients were converted to GA - 10% in B group and 11% in R group. They were excluded from the study. Adequate block with no supplementation was 63.3% in B group and 56.7% in R group which shows no significance. The average duration of post operative pain relief was 4.8hours in B group and 4.15hours R group. Both groups were haemodynamic stable throughout the study.

Conclusion

Inguinal field block is found to be safe and fulfills the requirements of quality analgesia with minimal or no side effects. Ropivacaine is less cardiotoxic than Bupivacaine. Ropivacaine compared to Bupivacaine provides efficient analgesia with good postoperative pain relief .

Key words

Inguinal field block, Ropivacaine, Bupivacaine Adequate analgesia, less cardiotoxic.