

BILATERAL TRANSVERSUS ABDOMINIS PLANE BLOCK USING ROPIVACAINE & BUPIVACAINE FOR LOWER SEGMENT CAESAREAN SECTION UNDER SPINAL ANAESTHESIA". (A PROSPECTIVE, RANDOMIZED, SINGLE BLINDED, PLACEBO CONTROLLED STUDY FOR EVALUATING THE ANALGESIC EFFICACY OF 0.5%ROPIVACAINE VS 0.25% BUPIVACAINE)

ABSTRACT:

BACKGROUND: Transversus abdominis plane block is a regional anaesthetic technique which provides analgesia after lower abdominal surgeries particularly where the somatic pain forms the main component of pain, from the incision of the anterior abdominal wall. TAP block provides sensory blockade of the skin over the lower abdominal wall by deposition of local anaesthetic drugs in the neurovascular plane between Internal oblique aponeurosis and transversus abdominis muscle. We evaluated the efficacy of bilateral TAP block using Ropivacaine & Bupivacaine for lower segment caesarean section done under spinal anaesthesia in a prospective, randomized, single blinded, placebo controlled study. **METHOD:** 75 pregnant women undergoing lower segment caesarean section (elective or emergency) were randomized to undergo USG guided bilateral TAP block with 0.5% Ropivacaine (n = 25) or 0.25% Bupivacaine (n = 25) or Normal saline (n = 25). At end of the surgery performed under spinal anaesthesia bilateral TAP block was performed under ultrasound guidance using 20 ml of 0.5 % Ropivacaine or 0.25 % Bupivacaine or saline on each side. Each patient was assessed postoperatively for Heart rate, Blood pressure, VAS scores, the time for initiation of analgesia and complications in postoperative ward every 15 minutes for first one hour, then at 2, 4, 6, 12, 24, 48 hours postoperatively in ward. The results were the mean duration of analgesia in the

control group(normal saline) was 1.49 hours, ranging from 0.5 to 0.25 hours and in the intervention group who received 0.25% Bupivacaine was 6.22 hours, ranging from 4 to 8 hours and in the group which received 0.5% Ropivacaine was 20.6 hours, ranging between 17.65 to 23.54 hours which was found to be statistically significant and there was no difference in the haemodynamic parameters of the intervention groups(Bupivacaine and Ropivacaine) . There were no complications attributable to TAP block or the drugs under study except a few cases of failure due to displacement of the needle while giving drugs. **CONCLUSION:** Hence we conclude that 0.5% Ropivacaine provided longer duration of analgesia than 0.25 % Bupivacaine when used in TAP block in women undergoing lower segment caesarean section.