words: TAP blocks; Postoperative analgesia; Regional anesthesia; pain control

oduction

Transversus Abdominis Plane (TAP) block was described 01 by AN. By utilizing anatomic landmarks to determine the e insertion site within the lumbar triangle of Petit, a single “pop” tion served as an endpoint for appropriate needle depth to de analgesia to the parietal peritoneum as well as the skin and les of the anterior abdominal wall [1]. Later, O’Donnell described double pop” technique, which resulted from the blunt needle ng through the fas_ blique and transverse abdominis muscle where the nerves are located.

in hemodynamics, respiratory rate, oxygen ation, sedation score, and side except for nausea were ved (p>0.05) [7].

nnervation to abdominal skin, muscles and parietal peritoneum locked, but dull visceral pain from spasm or ving surgical procedure will still be experienced [4].

vicaine vs Bupivicaine+Clonidine

gh et al. evaluated Addition of clonidine to bupivacaine ar section also using US guidance. One hundred patients ican Society of Anesthesiologists grade I and II were evaluated. to request for further analgesia and provide more subjects underwent low segment cesarean section under spinal hesia and were randomly divided in half to receive either 20 ml vacaine 0.25 or 20 ml bupivacaine+1 µg/kg clonidine bilaterally *via* block in a double-blind fashion. Duration of analgesia,

satisfaction score, requirement of analgesics in the 24 h, and the side of clonidine (sedation, dryness of mouth, hypotension, and bradycardia) were observed. Duration of analgesia was longer in the second group receiving bupivacaine and clonidine compared to the group receiving just bupivicaine ($P<0.01$). Additionally the combination with clonidine prolonged analgesia by 10-12 h and reduced overall postoperative analgesic requirements. For those who received the combination with clonidine, none of the patients experienced hypotension or bradycardia [8].

Bupivicaine *vs.* Bupivicaine+Dexmedetomidine

The of bupivacaine and dexmedetomidine added to bupivacaine used in TAP block by US guidance on postoperative pain was evaluated by Aksu et al. Sixty three patient enrolled, divided in 3 groups. Group C (Control) had TAP block with 21 mL 0.9% saline, Group B had 20 mL 0.5% bupivacaine+1 mL saline, Group BD and 20 mL 0.5% bupivacaine+1 mL 100 µg dexmedetomidine. Results demonstrated that with the addition of dexmedetomidine, the treatment of postoperative pain compared to control group and group B was VAS was lower at 10-24 hours, morphine consumption was lower and higher patient satisfaction for group BD. No was found on nausea and vomiting score, neither in the requirement of antiemetics [9].

Ropivicaine *vs.* Ropivicaine+Dexmedetomidine

In a double blind study by Manjaree Mishra et al. the of dexmedetomidina with ropivacaine was studied using 40 patients. Patients were divided into two groups: Group R (n=20) where patients received bilateral TAP block using 20 ml of ropivacaine 0.2% and 2 ml of normal saline, and Group RD (n=20) who received dexmedetomidine 0.5 mcg/kg dissolved in 2 ml of normal saline and added to 20 ml of ropivacaine 0.2%. Blocks were performed in the operating room intubation. Age and gender were taken in consideration in this study, showing no between those variables, as well as nausea and vomiting. results of this study showed that the group receiving combination of ropivacaine and dexmedetomidine has lower pain scores postoperatively

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