Group C: dexmedetomidine 1mcg/kg added to 20 ml 0.2% Ropivacine

Primary outcome was the measurement pain intensity based on VAS score upto 30 hrs postoperatively also measured the total duration of analgesia by each adjuvants, rescue analgesia (opioid consumption) quadriceps muscle weakness.

**Results** The patient characteristics and block success were comparable among the three groups. Group A patients had the least VAS score among the three groups. Group A had the longest duration of analgesia (group A 20.30±2.151, group B 17.95±2.057 and group C 14.67±1.446) the range of movement was also better with Group A compared to group B and group C which was stastically significant (p<0.001).

**Conclusions** From our study we concluded that all the three agents prolonged the duration of analgesia however the among the three agents dexamethasone had increased the effective analgesia time to a better extend compared to buprenorphine and dexmedetomidine. Furthermore Early mobilization was better with dexamethasone group compared with better range of movement.

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**Background and Aims** Suprainguinal fascia iliaca compartment block (SiFiB) is a valuable analgesic technique for hip surgery. Studies show that high volumes of solutions in this space reach lumbar plexus roots and thus, these blocks tend to use high volumes of low-concentration local anesthetics (e.g. 40 mL 0.125% levobupivacaine) spread all over the area covered by the solution. To achieve higher selectivity on nerve roots, we propose a novel technique using low volumes of hypobaric local anesthetics within a high volume of hyperbaric solution after fascial hydrodissection of the iliacus muscle (Figure 1).

This study aimed to assess the effects of a lumbar plexus block via an iliofascial approach using heterobaric solutions.

**Methods** A case series study using ultrasound-guided SiFiB was performed in 11 patients following hip replacement surgery. 40 mL of a 32.500 g/L glucosaline solution was administered ensuring compartmental hydrodissection. Cephalad spread was confirmed using ultrasonography (Figure 2). Subsequently, 7 mL of 8.600 g/L hypobaric 0.5% levobupivacaine were administered inside the fluid pocket (density difference of 23.900 g/
dL, the same between cerebrospinal fluid and hyperbaric bupivacaine). The patient was then seated up 90° for optimal distribution.

**Abstract B320 Figure 2**

Results 24-hours visual analog scale (VAS) and Quality of Recovery 15 score (QoR-15) mean scores were 1/3 (±0.65/1.13) and 70.7 (±3.93) respectively. Mean Strategic and Clinical Quality Indicators in Postoperative Pain Management (SCQIPP) score was 53.5 (±4.48). No adverse effects were reported. (Table 1)

**Abstract B320 Table 1**

Conclusions SiFiB with optimized baricity solutions may be a promising technique for analgesia in hip replacement surgery.

**B322** THE ROLE OF REGIONAL ANESTHESIA IN PREVENTING THE CHRONICIZATION OF PAIN: MECHANISMS AND EVIDENCE

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Background and Aims There is a positive correlation between the number of elective surgeries performed worldwide every year and the number of patients suffering from chronic postoperative pain (CPP).

As prevention is increasingly playing an important role, medical research focused on finding the perioperative triggering events for pain, with the goal of establishing guidelines to prevent the chronicization of pain.

Studies have shown that perioperative regional anesthesia can be one of the most important tools in the prevention of peripheral and central sensitization.

The aim of this presentation is to discuss the various mechanisms and methods employed by regional anesthesia to reduce the incidence of CPP.

Methods This review describes several aspects on regional anesthesia and its role in targeting important mechanisms responsible for the chronicization of pain. The review also...