dL, the same between cerebrospinal fluid and hyperbaric bupivacaine). The patient was then seated up 90° for optimal distribution.

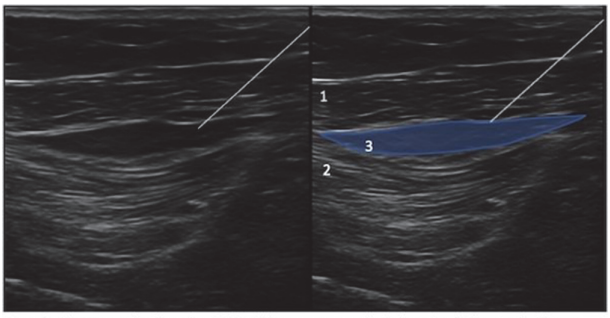


Figure 2 - Ultrasonography of suprainguinal fascia iliaca compartment hydrodissection. *(1. Iliac muscle, 2. Psoas muscle, 3. Local anesthetics solution).*

**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**

| Patient ID | PACU VAS score (rest) | 24h VAS score (rest) | 24 VAS score (mov.) | 24h QoR-15 score | SCQIPP score | Glycaemia (mg/dL) | Adverse effects |
|---|---|---|---|---|---|---|---|
| I | 0 | 0 | 1 | 68 | 55 | 132 | No |
| II | 0 | 0 | 2 | 70 | 49 | 169 | No |
| III | 0 | 0 | 4 | 74 | 55 | 92 | No |
| IV | 1 | 0 | 3 | 72 | 49 | 124 | No |
| V | 1 | 0 | 2 | 74 | 57 | 101 | No |
| VI | 0 | 1 | 4 | 70 | 51 | 79 | No |
| VII | 0 | 1 | 3 | 68 | 54 | 98 | No |
| VIII | 1 | 0 | 2 | 69 | 62 | 103 | No |
| IX | 0 | 1 | 3 | 71 | 59 | 126 | No |
| X | 0 | 2 | 4 | 79 | 50 | 115 | No |
| XI | 0 | 1 | 5 | 63 | 47 | 97 | No |
| Means | <1 | <1 | 3 | 70.7 | 53.5 | 112.4 | |

**Table 1.** Results

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

## B321 ANALGESIA NOCICEPTION INDEX AS AN INDICATOR OF ACUTE PAIN

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**Background and Aims** Analgesia Nociception Index (ANI) is a new method used to measure acute pain while the patient is unconscious. ANI detection principle is monitoring heart rate variability by using electrocardiography. Technology uses algorithms analyzing R-R complexes and breathing rate therefore assesses patient condition and his sympathetic and parasympathetic nervous systems activity. This innovative technology allows doctors to create an individual technique for dosing analgesic drugs to every patient.

This pilot study aimed to determine the usefulness of ANI for pain intensity during shoulder arthroscopic surgery.

**Methods** The pilot study was conducted in "Hospital of Traumatology and Orthopaedics" after Ethics Committee approval on August 2021. All twelve patients were under general anesthesia and were divided into two groups – with and without plexus brachialis block. ANI was monitored all the surgery time - from ET intubation till extubation.

**Results** In controlgroup "Block after surgery" the median of ANI values at surgery 15th minute were lower (56.5) compared with a group "Block before surgery" (69). Mean ANI values in control group were (54.17) meanwhile in group "Block before surgery" were (67.67)-which means analgesia without plecus brachialis block were poorer – and ANI effectively detected that. ANI values at group with block before surgery 95% CI [52.39–82.94]) and (95% CI [37.46–70.87]) in group with block after surgery.

**Conclusions** In the pilot study tendency is observed that ANI technology at pain detection works effectively and could be potentially useful tool for measurement of acute pain. The study will continue because much broader study is needed to get statistically significant results.

## 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

discusses the evidence presented in recent medical literature regarding the efficacy of regional anesthesia.

**Results** Even though regional anesthesia meets the premises required to prevent the development of CPP, there is insufficient data to measure the strength of its impact in preventing long-term pain.

The challenge lies in the heterogenicity of the sampled population, the variety of surgical techniques and the use of perioperative drugs and adjuvants during nerve block procedures.

**Conclusions** Regional anesthesia is one of the fastest growing areas within the field of anesthesia due to its many advantages over the use of opioids.

While further research needs to be conducted, there is evidence that regional anesthesia employed together with other preventative methods has high potential for reducing the incidence of CPP

## B323 USE OF ORAL HERBAL ANTI-INFLAMATORY THERAPY FOR THE REDUCTION OF POSTOPERATIVE PAIN IN PATIENTS AFTER TOTAL KNEE REPLACEMENT

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**Background and Aims** We evaluated the contribution of herbal anti-inflammatory therapy in the postoperative treatment of pain in patients after total knee replace(TKR). NSAIDs are the first line treatment in the management of acute inflammatory conditions. Unfortunately, these have some side effects, mainly gastrointestinal, cardiovascular and renal.

Herbal anti-inflammatory therapy is a combination mostly of BOSWELLIA and BROMELAIN. These have a unique mechanism of action that provides clinically proven antioxidant and anti-inflammatory benefits. Effective treatment of postoperative pain without drug side effects serves the patient's comfort, promotes joint mobility and protects against serious complications.

**Methods** 40 male patients who underwent TKR, aged 60–80 years. All received spinal anesthesia with ropivacaine 20mg. The 20 received herbal preparation (HP) one week before the surgery, morning and evening and the next 20 days postoperatively. The other 20 did not receive HP. All received the same post-operative pain treatment protocol. Resting pain (VAS) was assessed at 4, 12 and 48 hours, as were the following parameters:

HEADACHE
MOTION SICKNESS
VOMITING
CONSTIPATION
DRY MOUTH
ITCHING
URINARY RETENTION
DROWSINESS

**Results** VAS SCORE at 4,12,48 hours, the frequency of use of the PCA system and the total amount of tramadol were statistically lower in the HM group. Other parameters were also significantly less affected in the HM group..

**Conclusions** Preoperative and postoperative administration of herbal anti-inflammatory therapy significantly contributes to the reduction of post-operative pain in patients after TKR, reducing the consumption of opioids and their side effects. Herbal anti-inflammatory drugs have high bioavailability, maximum effectiveness and most importantly gastric tolerance.

## B323.1 COMPARISON OF ULTRASOUND-GUIDED ERECTOR SPINAE PLANE BLOCK AND QUADRATUS LUMBORUM BLOCK FOR POSTOPERATIVE ANALGESIA AFTER CAESAREAN SECTION: A PROSPECTIVE RANDOMISED STUDY

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10.1136/rapm-2022-ESRA.399

**Background and Aims** Caesarean section can cause somatic and visceral pain. Adding a regional anesthesia technique to multimodal analgesia improves the quality of postoperative pain relief. Quadratus lumborum block (QLB) has shown to provide good analgesia post-caesarean section. In this novel study, we aimed to compare Erector spinae plane block (ESPB) with QLB for analgesia after caesarean section.

**Methods** This prospective, randomized, double-blinded study was approved by the Institute ethics committee and registered with clinical trials registry (CTRI/2022/02/040404). Following exclusion, 112 patients were randomised to receive either a bilateral transmuscular QLB or an ESPB (at T12) with 20 ml 0.25% ropivacaine on each side (after the completion of caesarean section under subarachnoid block). All patients received prophylactic acetaminophen for 2 days.Our primary objective was to evaluate tramadol consumption in the first 48 hours. Secondary objectives were to compare the time for first rescue analgesic requirement, visual analogue scale (VAS) at rest and movement, to assess for any complication and to compare the overall satisfaction with analgesia.

**Results** The mean tramadol consumption at 48 hours, the duration of first rescue analgesia and patient satisfaction was similar between both the groups. NRS score was lower in ESPB on movement at 4 hours, at rest and movement at 6 hours and on movement at 36 hours, however, both groups had comparable NRS scores at other times. Neither group reported complications related to block (Table 1).