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.

### 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 control group “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 plexus 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.

### 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