

**Conclusions** ITMB enhanced analgesia during the early postoperative period in patients who underwent RALP, compared with RSB. The postoperative requirement for opioid analgesics were also significantly decreased in the ITMB group. Thus, intrathecal analgesia is considered an effective analgesic modality for RALP. Further studies are needed to promote patient recovery.

#### EP052 :FASCICULAR INJURY IS RARE FOLLOWING NEEDLE TRANSFIXION: A STUDY ON MEDIAN AND ULNAR ISOLATED HUMAN NERVES

<sup>1</sup>Jorge Mejia\*, <sup>2</sup>Victor Varela, <sup>3</sup>Miguel Angel Reina, <sup>2</sup>Xavi Sala. <sup>1</sup>Barcelona, Spain; <sup>2</sup>Anesthesiology, Hospital Clinic, Barcelona, Spain; <sup>3</sup>Anesthesiology, Hospital Universitario Madrid Montepíncipe, Madrid, Spain

10.1136/rapm-2023-ESRA.114

**Background and Aims** Needle trauma has been associated to peripheral nerve injury and neurological dysfunction. However, inadvertent needle puncture is not infrequent while post-block dysfunction is rare. We conducted a cadaveric study to evaluate the association between needle puncture and fascicular injury.

**Methods** Five median and five ulnar (isolated) nerves were obtained from unembalmed fresh human cadavers. 4 different needles were used for the punctures: A 22G nerve block needle (Stimuplex 360, 30 degrees beveled), and 22G, 25G and 27G spinal needles (Yale, 15 degrees beveled). 10 transfixing punctures were made with each needle type on each nerve (40 punctures per nerve). Needles were withdrawn and nerves fixed in 5% formalin for 72 hours. Perpendicular microtome sections of the punctured segments were obtained. Samples were embedded in paraffin and analyzed under microscope with hematoxylin-eosin staining. For each section, the following variables were obtained: ratio of fascicular/epineurial tissue, number of fascicles per nerve, number of injured fascicles.

**Results** A total of 400 transfixing punctures were made (200 in median and 200 in ulnar) and 144 histological nerve sections analyzed (74 median and 70 ulnar). Median nerves had 15 +/-3 fascicles and ulnar 17+/- 4. The ratio of fascicular/epineurial tissue was 47 +/-14% in median and 43+/-6% in ulnar. Three fascicular injuries were found (1 in median, 2 in ulnar). All 3 injuries were caused by a 15 degree beveled needle (22G in median, 27G and 22G in ulnar).

**Conclusions** The risk of fascicular injury is low following a transfixing needle puncture.

#### EP053 SUBPARANEURAL SCIATIC NERVE BLOCK ABOVE AND BELOW ITS DIVERGENCE AT THE POPLITEAL FOSSA: A RANDOMIZED DOUBLE-BLIND STUDY

<sup>1</sup>Jatuporn Pakpirom, <sup>2</sup>Ranjith Kumar Sivakumar\*, <sup>3</sup>Manoj Kumar Karmakar. <sup>1</sup>Department of Anesthesiology, Prince of Songkla University, Hat Yai, Thailand; <sup>2</sup>Anaesthesia and Intensive Care, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong; <sup>3</sup>Anaesthesia and Intensive Care, The Chinese University of Hong Kong, Shatin, Hong Kong

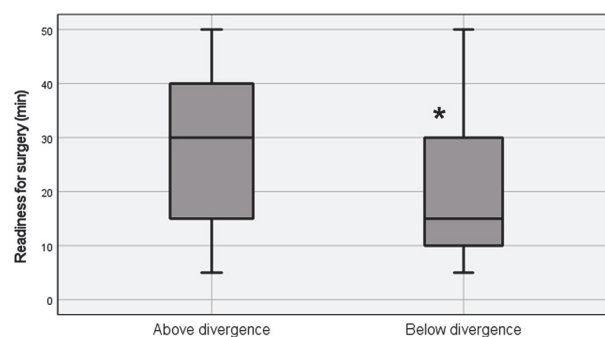
10.1136/rapm-2023-ESRA.115

**Background and Aims** Achieving rapid onset of surgical anaesthesia after an ultrasound-guided popliteal sciatic nerve block (PSNB) is still a challenge. We hypothesised that two subparaneural injections below the divergence (BD) of the sciatic

nerve would hasten sensory-motor block onset when compared to two injections above its divergence (AD).

**Methods** After ethical approval and informed consent, 70 ASA I – III patients, aged 18 to 75 years, scheduled for elective foot and ankle surgery were randomised into two groups. Patients in group AD received two subparaneural injections anterior and posterior to the sciatic nerve above its divergence, while group BD received subparaneural injections into the individual subparaneural compartments of the common peroneal nerve (CPN) and tibial nerve (TN) below the divergence, with 30 ml of 0.5% levobupivacaine. To achieve this, the subparaneural compartment of the sciatic nerve was initially distended with normal saline at the divergence. A blinded observer assessed sensory and motor blockade using a numeric rating scale (NRS 0-100) and a Likert scale (0-2) respectively. ‘Readiness for surgery’ (sensory score  $\leq$  30/100 and motor score  $\leq$  1/2) was the primary outcome variable of this study.

**Results** The median [IQR] time to ‘readiness for surgery’ (figure 1) was significantly faster ( $p=0.02$ ) in group BD (15 min [10-30 min]) than in group AD (30 min [15-40 min]) .



**Abstract EP053 Figure 1** Time to readiness for surgery after a subparaneural popliteal sciatic nerve block. Data are presented as a median [IQR]. \* indicates  $p=0.02$

**Conclusions** Ultrasound-guided subparaneural PSNB as two separate injections below the divergence of the sciatic nerve hasten the time to ‘readiness for surgery’ when compared to two injections above the divergence.

#### EP054 COMPLICATIONS IN CONTINUOUS PERIPHERAL NERVE BLOCKS AT HOME: A RETROSPECTIVE COHORT ANALYSIS OF 1,370 CASES FROM A UNIVERSITY-BASED HOSPITAL

Natalia Molina\*, Pablo Miranda, Francisca Elgueta, Daniela Biggs, Fernando Altermatt. Anesthesiology, Pontifical Catholic University of Chile, Santiago, Chile

10.1136/rapm-2023-ESRA.116

**Background and Aims** Continuous regional analgesia at home is a technique for postoperative pain management but is not exempt from complications. The following retrospective cohort study aims to determine the incidence and nature of the complications related to continuous regional analgesia at home.

**Methods** A retrospective analysis was conducted on 1,370 patients receiving continuous peripheral nerve analgesia at home, taken from our Pain Unit database. Data were collected on patient demographics, medical history, surgical procedure,