Results

High risk patients were able to undergo successful thoracic surgery with diagnostic and therapeutic intent facilitated by ultrasound guided regional anaesthesia paravertebral block alone. All thoracoscopic procedures were completed with successful diagnostic and therapeutic outcomes.

Conclusions

Non intubated awake thoracic surgery techniques have developed in parallel with adoption of videothorascopic surgical technology. Previous descriptions have utilised locoregional anaesthesia with either intercostal blocks or thoracic epidural anaesthesia, and intravenous sedation1,2. We present a case description of our technique for successful thoracoscopic procedures in high risk patients performed under paravertebral regional anaesthesia alone without intravenous sedation or general anaesthesia.

Background and Aims

Hip has a complex innervation and therefore it is a challenge to anesthetize it solely with peripheral nerve blocks. There are just a few cases described in literature where PENG block was used with anaesthetic goals and, as far as we know, there is no description of the association of blocks here described.

Methods

We describe a female 82 year old patient, 72kg, with previous systemic hypertension and heart failure NYHA III with a femur fracture for an intramedullary nail. After monitoring, the following ultrasound guided nerve blocks were performed: PENG block (20 mL 0.5% Ropivacaine), Lateral Cutaneous Femoral Nerve (5 mL 0.5% Ropivacaine) and Obturator nerves at subpectineus plane (15 mL 0.5% Ropivacaine). Additional light sedation was achieved with dexmedetomidine IV (0.5mcg/kg/h) and ketamine (0.5mg/kg).

Results

Surgery underwent smoothly without the need of any other anaesthetic drugs, patient sedated in RASS -3.

In the following 24h after surgery, there was no pain complaint or need of opioids.

Conclusions

The anterior capsule of the hip is innervated by the lumbar plexus and the posterior capsule by the sacral plexus. The lateral side of the thigh is innervated by the lateral femoral cutaneous nerve, also part of lumbar plexus. Studies showed that the nociceptors concentrate mainly on the anterior capsule, thus the lumbar plexus is the main responsible for hip anaesthesia.

In this particular case, it was chosen to focus on lumbar plexus blocks through blocks mentioned previously.

By choosing this technique, we aimed to avoid approaching neuroaxial techniques or general anaesthesia preventing haemodynamic changes.
We decided to go ahead with the interscalene block. 5 ml of 0.5% bupivacaine was given at the C5-C6 roots and 5 ml of 0.5% bupivacaine was given at the C7 root. The plexus was traced to the supravclavicular area and 10 ml of 0.5% bupivacaine was administered at the supravcavicular brachial plexus. The patient was given head low position. The block was assessed every 10 min for the next 30 mins.

Results We could achieve motor and sensory block adequate for surgery without supplementation of additional local anaesthetic and sedation. No complications occurred.

Conclusions Anatomical variation of the interscalene brachial plexus is challenging but with proper planning block failure can be avoided.

Background and Aims This audit had the aim to clear how the Uni-knee replacement procedures are anesthetised in the NOC with a special focus on the adductor canal block technique regarding the used volume, agent and concentration.

Methods 41 patients where reviewed in a retrospective way. Uni-knee replacement was picked up to try to standardise the surgical technique to eliminate the surgical technique as a source of pain.

The methods of adductor canal administration were reviewed and the post operative pain, reflected by the amount of postoperative opioid consumption, was collected.

Results The Adductor canal block was performed in 10 different ways with varying drugs, concentration and volumes. Only 11% of the cases received the standard technique which would be the volume of 20 ml and the Ropivacaine 0.7% (Bupivacaine 0.5%) as the local anaesthetic agent.

Because of the technique was highly variable, accurate data was not obtained, as more cases needed to demonstrate a significant statistical difference between techniques. In general, a volume of 10–15 ml of bupivacaine 0.5% had a non significant statistical difference in opioid consumption postoperatively compared with 20 ml of the same agent, which indicates a volume of 10–15 ml of bupivacaine 0.5%, or Ropivacaine 0.7% have the same effect of higher volumes but with a wider margin of safety.

Conclusions Standard technique would suggest a volume of 10–15 ml of 0.3% Ropivacaine with discarding 10 ml of the local anaesthesia solution prepared by the surgeons to achieve safety. Re-audit regarding the post-operative opioid consumptions is required.

Background and Aims Total knee arthroplasty (TKA) improves mobility and quality of life but is followed by severe to moderate pain postoperatively [1–2]. Blocking anterior femoral nerve branches (AFNB) in combination with femoral triangle (FT) and adductor canal (AC) is considered to help with early ambulation and overall patient’s satisfaction [3]. We aimed to compare pain and functional recovery in patients who underwent TKA.

Methods Bioethics Centre at LUHS approved the study (BEC-MF-291). Patients undergoing TKA were included in this prospective, double-blind study and randomised into two groups. Group A (A) contained 21 patients undergoing proximal FT (pFT), distal AC (dAC) and AFNB block, and Group B (B) 19 patients undergoing distal FT (dFT) and dAC block. Pain according to VAS, opioid consumption, extent of motor block (Bromage scale) were assessed after 3, 6, 24 and 48 hours and ability of early ambulation (Timed Up and Go (TUG) test) - 24 and 48 hours after the surgery.

Results 40 patients were tested, 12 (30%) men and 28 (70%) women, mean age 65.73 (8.65) years. Demographics did not differ statistically significantly (p>0.05). There was no difference in VAS scores and Bromage scale between groups. Opioid consumption after 6 hours was statistically significantly lower in A than B with 1 (4.8%) and 6 (31.6%) patients, respectively (p=0.039). TUG test took slightly shorter in A than B after 24 and 48 hours, but was statistically insignificant (p>0.05).

Conclusions Statistically significantly lower opioid consumption proved that AFNB block improves FT and AC block. Further research with larger samples is needed.

Background and Aims Regional anaesthesia (RA) is an accepted analgesic and anaesthetic technique in orthopaedic surgery but some barriers remain surrounding its use in trauma. The aim of this study was to ascertain whether RA provides added benefits over general anaesthetic (GA) alone in a trauma setting.

Methods All patients undergoing wrist open reduction and internal fixation procedures in a teaching hospital between April 2020 and October 2021 were entered into an Excel database. Demographics, theatre timings, type of anaesthesia and post-operative analgesia were collected. Statistical analysis was carried out using the two-tailed T-test.

Results In a total of 90 patients, post-operative opioid requirements were reduced by 13 mg of morphine equivalence (p= 0.003) when using RA over GA, whilst the anaesthetic time was increased by only 10 mins (p= 0.018) when using RA. Time in recovery was 30 minutes less for the RA group (p=0.06). There was no overall difference in total anaesthetic and surgical time, nor a difference in length of stay.

Conclusions As we emerge from a global pandemic, hospitals continue to struggle for bed capacity. With RA in wrist trauma reducing post-operative opioid requirements significantly, as well as, reducing time in recovery, with only a minimal increase in anaesthetic time, there is evidence that this can be