Conclusions ESPB is a feasible alternative anaesthetic technique for abdominal surgery in frail and severely ill patients, as demonstrated in this case. The synergic combination of dexmedetomidine and ketamine provides effective sedation and potentiates analgesia with a safe respiratory and hemodynamic profile.

**Abstract #35914**

**ANESTHETIC INTERSCALENE AND CERVICAL PLEXUS BLOCK FOR A TOTAL SHOULDER REPLACEMENT IN A PATIENT WITH ALLERGY TO ROCURONIUM AND CISATRACURIUM: A CASE REPORT**

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Please confirm that an ethics committee approval has been applied for or granted: Not relevant (see information at the bottom of this page)

Application for ESRA Abstract Prizes: I don’t wish to apply for the ESRA Prizes

Background and Aims Allergy to muscular relaxants is still a big concern to Anesthesiologists. This case discusses interscalene block as an alternative to General Anesthesia in a patient with confirmed allergy to Rocuronium and Cisatracurium.

Methods We report a case of 73-year-old female, ASA III, with positive skin tests to Rocuronium and Cisatracurium. Patient had a humeral fracture and was proposed for a Total Shoulder Arthroplasty. Anesthetic plan was discussed with the patient prior to the procedure and informed consent was obtained. After monitoring, the patient was given intravenous fentanyl 0.05 mg and midazolam 1mg and a dexmedetomidine perfusion was initiated. An ultrasound guided interscalene brachial plexus block (ISB) and cervical plexus block (CBP) were performed using 15 mL of ropivacaine 0.5% and mepivacaine 0.6% and 5mL of ropivacaine 0.5% and mepivacaine 0.6%, respectively. Patient was positioned in beach chair. Skin incision was made 20 minutes after local anesthetic injection. Surgery lasted for 1 hour and 30 minutes, and the patient only referred mild discomfort due to the sitting position nearly the end of the surgery. Patient controlled analgesia with intravenous morphine and ketamine was used post-operatively.

Results There were no complications, and patient demonstrated high level of satisfaction.

Conclusions Positivity of skin test reaction to neuromuscular blocking agents makes their use unsafe. A CPB along with an ISB can provide anesthesia to the roots C2 to C4 and C5 to C7, respectively. Together they represent an alternative anesthetic technique to General Anesthesia for shoulder surgery.

**Abstract #35899**

**POST-MARKET CLINICAL INVESTIGATION OF SAFETY, PERFORMANCE AND ANAESTHETIST SATISFACTION OF THE ‘SAFE INJECTION FOR REGIONAL ANAESTHESIA’ (SAFIRA) DEVICE IN ULTRASOUND GUIDED PERIPHERAL NERVE BLOCKADE**

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10.1136/rapm-2023-ESRA.521

Please confirm that an ethics committee approval has been applied for or granted: Yes: I’m uploading the Ethics Committee Approval as a PDF file with this abstract submission
Background and Aims: Mechanisms of nerve injury related to a peripheral nerve block (PNB) include mechanical trauma, ischaemia and local anaesthetic toxicity. The SAFIRA device aims to reduce risk of mechanical nerve injury. It comprises a motor unit allowing user to aspirate and inject local anaesthetic (LA) on demand preventing LA infiltration pressure over 20 PSI. This study is an international, multicentre, observational, prospective, non-controlled, post-market clinical follow-up investigation.

Methods: Peripheral nerve blocks by anaesthetists trained on SAFIRA were recruited across two sites. Inclusion criteria included patients 18 plus years undergoing elective orthopaedic surgery suitable for PNB. Data yielded included demographic data, PNB type and time to perform & assessment of safety and usefulness of the device and 30 day post PNB follow-up. Ethics approval was granted from HRA & HCRW.

Results: 128 PNB were conducted with the SAFIRA device (64 from each site). All blocks were successful with no permanent complications reported. 9 patients experienced transient symptoms on initial injection. 3 device malfunctions were reported and due to user error. 82% of the anaesthetists expressed preference for using SAFIRA device.

Abstract #35899 Figure 1  SAFIRA DEVICE

Conclusions: This study indicates SAFIRA device is safe & effective. We recommend local standard operating procedures are developed to minimise human error. Anecdotally some of the anaesthetists in the study reported using less volume of local anaesthetic compared to their usual practice. This could represent an unintended, but very useful, benefit of the device and warrants further study.

Attachment 293036_Letter_of_HRA_Approval_22032021.pdf

Background and Aims: In replantation surgery maintenance of limb perfusion and adequate analgesia are critical. Since regional anesthesia can offer pain control and vasodilation it plays an important part in this patient managing.1 These are long-lasting surgeries, there is sometimes a fear of using a single shot as anesthetic technique. The median duration of ropivacaine induced anesthetic block varies between 4-8h.2 We report 4 cases of finger reimplantation surgeries performed under brachial plexus (BP) block without using any adjuvant.

Methods: We describe 4 cases in which an alternative approach to axillary BP block was performed, under ultrasound-guidance, as anesthetic technique. After visualization of the median, the ulnar and the radial nerves, 10 mL of ropivacaine 0.5% was distributed around them. Then, a distal scan was performed and another 10 ml were administered when the 3 nerves were no longer surrounded by local anesthetic. A propofol perfusion was used to light sedation.

Results: Surgeries lasted on average 8.6 hours and proceeded uneventful.

Conclusions: Balance between anesthesia, analgesia and peripheral vasodilation is not always easy since systemic agents used in general anesthesia and systemic analgesics may decrease median blood pressure and impair limb perfusion. The same happens when adrenaline is used as adjuvant to prolong peripheral blocks. With this case series we were able to show that with a single shot BP block it is possible to safely perform a 9 hour surgery without use of any adjuvant, taking advantage of all the benefits of the sympathetic block and analgesia associated with this technique.

Attachment Sem Titulo.jpg

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Background and Aims: Continuous peripheral nerve block (CPNB) is an effective technique for acute pain control with a low incidence of serious adverse events. However, failure is a recognised complication and not uncommon. This audit aims to establish the incidence of primary (inadequate insertion) and secondary failure (catheter displacement, disconnection, occlusion, leakage) at our institution.

Methods: All patients receiving CPNB over a 3-month period (August to October 2022) at St George’s Hospital, UK, were identified. Information on their management was collected retrospectively from their electronic hospital records.

Results: 120 episodes of CPNB in 103 patients were analysed. 65% (n=77) were chest wall catheters: 32% (n=38) paravertebral (PV); 21% (n=25) erector spinae plane (ESP) and 12% (n=14) serratus anterior plane (SAP). 27% (n=32) were sciatic. The remaining 10% (n=11) included intrapleural, femoral, rectus sheath and transversus abdominal plane (TAP) catheters. Mean catheter duration was 3.9 ± 2.3 days. Overall, 67% (n=80) remained until no longer clinically needed. However, 30% (n=36) were removed for other reasons. The majority of these, 75% (n=27), suffered problems of...