Abstract B28 Figure 1  Bilateral EOI catheters in-situ for transitional postoperative pain management in a patient who underwent pancreaticoduodenectomy

Results All patients remained pain and opioid free and able to mobilise and breathe effectively. All patients were very satisfied with analgesia provided by the EOI catheters.

Conclusions With the evolution of regional anaesthesia techniques, the opioid use in acute pain management needs to be re-evaluated. We used the EOI block to provide enhanced recovery analgesia for pancreaticoduodenectomy. We have shown that a regional block could be used for step-down analgesia to avoid opioid use and improve outcomes.

Abstract B29 Figure 3  Bilateral EOI catheters in-situ for transitional postoperative pain management in a patient who underwent pancreaticoduodenectomy

Conclusions This report should encourage pediatric anesthesiologists to familiarize themselves with ultrasound guided caudal blocks as certain situations will dictate such a need.

Background and Aims Kagami ogata syndrome (KOS) patients present with craniofacial dysmorphism, thoraco abdominal abnormalities, and kyphoscoliosis. The choice of regional anaesthesia poses a real challenge as the reliance on the usual regional anesthetic techniques including lumbar epidural, paravertebral, fascial plane blocks, and landmark caudal blocks can be very challenging.

Methods We elected to perform a real time ultrasound (US) guided caudal epidural block (CEB) in a patient with a medically challenging spine anatomy to identify the midline, depth, and level with spread of local anaesthesia into the caudal epidural space.

Results All patients remained pain and opioid free and able to mobilise and breathe effectively. All patients were very satisfied with analgesia provided by the EOI catheters.

Conclusions With the evolution of regional anaesthesia techniques, the opioid use in acute pain management needs to be re-evaluated. We used the EOI block to provide enhanced recovery analgesia for pancreaticoduodenectomy. We have shown that a regional block could be used for step-down analgesia to avoid opioid use and improve outcomes.

Abstract B29 Figure 1

Background and Aims Successful vascular access in the upper arm for hemodialysis is crucial for patients with end stage renal insufficiency. Arteriovenous fistula (AVF) is the vascular access of choice in this patient population. Different techniques (general, regional, local anesthesia) have been implemented to produce surgical anesthesia. Regional anesthesia (RA) in the form of ultrasound guided brachial plexus block (UGBPB) has been shown to increase success and maturation rates of AVF, producing perioperative sympathetomy-like effects, vasodilation and increased AVF blood flow. This review seeks to present and synthesize the literature regarding the impact of UGBPB on the outcome of AVF creation.

Methods An extensive search of the electronic databases of “PubMed” and “Google Scholar” was conducted using the phrases “anesthesia”, “regional anesthesia”, “brachial plexus block”, “ultrasound guided brachial plexus block”, “regional versus local anesthesia” in combination with “arteriovenous fistula” and “end stage renal disease”.

Results Eight heterogeneous studies reporting on 856 patients were included in this review. They are five randomized controlled and three prospective studies. UGBPB was carried out using the supraclavicular, infraclavicular or axillary approach. UGBPB produced higher AVF blood flow in the early and late postoperative period and higher primary AVF patency rates than local anesthesia. In some studies RA modified the type of AVF.

Conclusions UGBPB causing vasodilation by unknown mechanism that mimics parasympathetic nervous system action enhances AVF patency and maybe modifies surgical plan. Large scale, randomized controlled trials, focusing on randomization method, are necessary to produce safe conclusions.

Abstract B30 Figure 2

Background and Aims Ultrasound-guided transversus abdominis plane (TAP) block is a regional anaesthesia technique which, as part of a multimodal analgesia regimen, may provide an alternative to epidural analgesia. We report 3 cases of patients where a bilateral dual TAP block (subcostal and lateral approaches) was used to minimize opioid use after major abdominal surgery.

Methods
73 years’ old female, ASA III, with advanced ovarian carcinoma and extensive peritoneal carcinomatosis, who underwent emergency median laparotomy and colostomy for intestinal occlusion;

67 years’ old female, ASA III, with localised scleroderma scheduled for open left hemicolecotony for a colon tumour;

62 years’ old male, ASA II, scheduled for hand-assisted laparoscopic resection of a rectal tumour.

A total intravenous anaesthesia and multimodal IV analgesic regimen were used, including paracetamol, non-steroid anti-inflammatory and dexamethasone, alongside an ultrasound guided bilateral dual TAP block at the start of the procedure, with a total of 50–60 mL ropivacaine 0.2% and adequate spread in the relevant planes. Tramadol or morphine were used postoperative as needed.

Results Post-operative IV opioid consumption was 12mg morphine or 300mg tramadol in 24 hours, with no opioids required after 48 hours. The pain was well controlled (maximum 2 at rest and 3 with movement out of a 11 points visual analogue scale). The patients reported high satisfaction and no nausea.

Conclusions Bilateral dual TAP block was part of an effective opioid-sparing multimodal analgesia for major abdominal surgery, and its benefits as an alternative to epidural analgesia may merit further study.

Background and Aims Cryoneurolysis delivered via a cryoprobe for the treatment of acute and chronic pain has been described as far back as 1961. It has previously been described as a treatment for chronic shoulder pain via a landmark technique and acute post-operative shoulder pain via ultrasound guided technique. However, it’s application via ultrasound guidance for chronic shoulder pain has yet to be described.

Methods This is a case series of three adult patients who had chronic shoulder pain. All patients had previous landmark-based injections of their suprascapular nerve by their orthopedic surgeon using lidocaine that resulted in pain relief. Patients were seated on the edge of the bed and the suprascapular nerve was identified in the suprascapular notch via ultrasound using a 10–5 MHz probe. Then a 20-gauge 90 mm cryoprobe was advanced in plane in a medial to lateral direction until contact with the suprascapular nerve was obtained. A 106 second treatment cycle was started where an ice ball the size of 7.1 mm wide by 16.0 mm tall was performed. The treatment reached a temperature of -88 Celsius and resulted in second degree temporary nerve degeneration.

Results All patients had immediate pain relief with pain reduction to 0. Motor weakness lasted from 14–18 days. Follow up phone calls showed a duration of pain relief of 3–6 months. No adverse events were observed.

Conclusions Ultrasound guided cryoneurolysis may have a place in the management of chronic shoulder pain with a duration of pain relief from 3–6 months and motor weakness subsiding by 3 weeks post treatment.

Background and Aims Selective suprascapular nerve and superior trunk blocks are described for clavicle surgeries. This series objective was to observe feasibility of selective middle, inferior trunk (MT/IT) and musculocutaneous nerve (MCN) block towards a site specific regional strategy for distal forearm surgery.

Methods After informed consent, 10 patients undergoing distal forearm surgeries underwent selective MT (3 ml), IT (4 ml) and MCN (3 ml) blocks with equal mixture of local anaesthetics (2% Lidocaine and 0.5% Bupivacaine). MT and IT were identified with systematic sign based scanning. MT was blocked distal to C7 transverse-process where C7 ventral-ramus (VR) appeared multifascicular as hyperechoic honey comb (Figure 1). The IT was blocked where C8 and T1-VR combined over first rib (Figure 2A&B). Subsequently arm was abducted and MCN blocked at the distal axillary crease (Figure 2C & D). Sensory-motor mapping at 30 minutes, strategy success, requirement of rescue measure, analgesic duration and complications were noted (Table 1).

Background and Aims Selective middle and inferior trunk of brachial plexus block towards site specific regional anaesthesia for distal forearm surgery – A pilot series

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