

### B48 ERECTOR SPINAE PLANE BLOCK FOR OPIOID-SPARING BREAST SURGERY APPROACH

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**Background and Aims** Chronic pain is an important complication of breast surgery, affecting 20 to 30% of patients. We present a case of a 45-year-old woman admitted for prophylactic bilateral simple mastectomy with implant reconstruction. Due to an ovarian carcinoma BRCA1-mutation related, she had previously undergone hysterectomy with bilateral adnexectomy, where obstipation secondary to opioids was a major side effect. The patient specifically asked for an opioid-sparing technique for this reason. We aimed to demonstrate that a pre-emptively erector spinae plane block (ESPB) can be part of a multimodal analgesic opioid-sparing technique.

**Methods** A single shot, ultrasound-guided, bilateral ESPB was performed at T5 level, using 0,375% ropivacaine with sodium bicarbonate 8,4%, for a total of 40 mL. A total intravenous anaesthesia (propofol and remifentanyl) was then induced, and analgesia was complemented with ketorolac (30mg), ketamine (30mg), paracetamol (1000mg) and metamizole (2000mg).

**Results** The surgery was uneventful and effective analgesia was achieved with this strategy (0 pain at rest and 3 with movement out of 10 points in the visual analogic scale). There was no need for opioids in the postoperative period and pain at rest was only reported more than 24h after the block. The patient didn't show any gastrointestinal symptoms.

**Conclusions** Despite not being routine in our centre, this case presents ESPB as a major contributor to effective multimodal opioid-sparing analgesia in breast surgery. The avoidance of the opioids' gastrointestinal side effects in this procedure greatly improved the patients' satisfaction.

The patient consent was obtained for this case presentation.

### B49 USE OF ULTRASOUND GUIDED QUADRATUS LUMBORUM (QL) BLOCKS FULFILS 'DREAM' "PROSPECT" POST ABDOMINOPLASTY

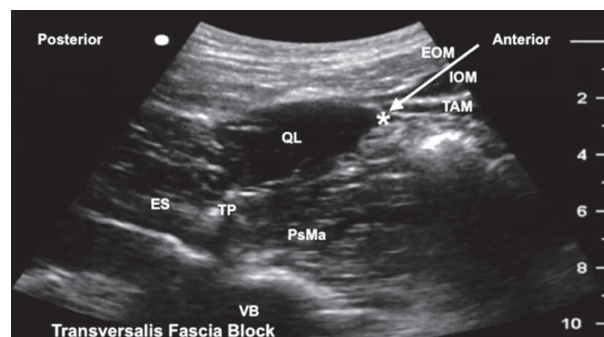
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**Background and Aims** The PROcedure-SPECific Pain Management (PROSPECT)<sup>1</sup> and Drinking eating, mobilising (DREAM)<sup>2</sup> fulfilment for Abdominoplasty by use of QL Blocks. The study aimed to observe the efficacy of abdominal blocks against the standard opiate based pain management strategy post Abdominoplasty. Our primary outcome assessed the total morphine use and Secondary outcomes include timing of morphine request, the incidence of nausea and vomiting/side effects. Somatic pain is transmitted by ventral rami of spinal nerves, usually T10-L1 and traverses between QL and psoas muscles before entering transversalis fascia. The visceral pain return via inferior hypogastric plexus to enter spinal cord via T10-L1 spinal nerves.

**Methods** We retrospectively studied morphine requirements in patient records comparing 20 patients having Abdominoplasty with QL Block under USG vs no QL Block group. The transducer was placed in the transverse plane on the flank of

the patient cranially to the iliac crest, at the level of the umbilicus perpendicular to the skin. The muscle layers of the abdominal wall were identified and QL was identified medial to the aponeurosis of Transverses abdominis. 0.4 mL/kg 0.25% Levobupivacaine 30 mL under USG guidance with 21G Ultra-plex 100 mm nerve block needle bilaterally.



Abstract B49 Figure 1

**Results** Data analysis demonstrated a 40% opioid-sparing effect of the QL block during the first 24 hours postoperatively as compared to Non QL block group.

**Conclusions** USG guided QL blocks provide opiate sparing analgesia for Abdominoplasty surgery. Posteriorly placed TAP works better and last longer due to PVB spread. Opiate requirements are minimal and side effects reduced postoperatively with QL blocks.

### B50 PROTOTYPE BLOCK PHANTOM WITH NEEDLE TIP POSITION FEEDBACK

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**Background and Aims** Ultrasound-guided regional anaesthesia requires needling expertise to minimise the risk of nerve damage – the needle tip should be neither too far from the nerve nor within the nerve, but in the “near-nerve” zone. Whilst block phantoms exist to allow trainees to learn this skill without putting patients at risk, generally they do not provide feedback as to needle tip position relative to the nerve – the trainee may think they are visualising the tip but actually it may be somewhere else.

**Methods** ADAMgel (Aqueous Dietary fibre Antifreeze Mix gel, a tissue-simulating ultrasound medium [1]) was used to form a tubular coating (representing the near-nerve zone) around a copper rod (the nerve), then wrapped in an insulating layer. This was embedded in more ADAMgel, along with a fluid-filled balloon to simulate a blood vessel. A latex sheet formed the skin. Electrodes connected to the ADAMgel layers, the copper nerve, and the needle tip were fed to an Arduino programmable microcontroller, which was connected to a liquid-crystal display (LCD) (Figure 1). C++ code uploaded to the Arduino allowed it to detect change in resistance as the needle tip advanced through the layers.