

**Background and Aims** This randomised controlled trial aims at comparing the efficacy of postoperative analgesia by USG guided single shot Femoro-sciatic block (FSB) with lumbar epidural block (EB) in patients of 14-60 years undergoing corrective orthopaedic procedures attributed to bone malignancy around the knee viz, distal end of femur and proximal end of tibia.

**Methods** **METHODS** 30 patients undergoing elective surgery for knee tumour resection and endoprosthesis placement for various bone malignancies at

A.I.I.M.S. New Delhi India were enrolled after approval of institute ethics committee & randomised to 2 groups as per intervention for postoperative analgesia viz Group E, receiving general anaesthesia (GA) with EB and Group FS, receiving GA with ultrasound guided FSB. EB was performed with 0.25% Ropivacaine 10ml with 0.5mcg/kg Clonidine as adjuvant and FSB with 15 ml and 20ml of 0.25% ropivacaine with 0.5mcg/kg clonidine around femoral and sciatic nerve respectively. The primary outcome was quality of postoperative pain as assessed by VAS Score and total analgesic requirement in the first 24 hours postoperatively. The secondary outcomes were comparison of intraoperative hemodynamics, blood loss, incidence of adverse effects like PONV, pruritus, neurological sequelae, respiratory depression, & overall patient and surgeon satisfaction assessed.

**Results** **RESULTS** In FS Gp. VAS scores were better ( $p$ -value  $<0.001$ ), consumed less fentanyl ( $186.7 \pm 56.4$  mcg in Group FS and  $277.33 \pm 45.9$  mcg in Group E)  $p < 0.01$  & provided prolonged pain relief. Secondary outcomes were comparable in both groups

**Conclusions** **CONCLUSION** USG FSB is superior to single shot lumbar EB in providing postoperative analgesia in knee tumour resection and endoprosthesis surgeries.

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### #36380 SENSORY BLOCK DYNAMICS OF A MULTI-LEVEL INTERTRANSVERSE PROCESS BLOCK AT THE RETRO-SCTL SPACE: A CASE SERIES

<sup>1</sup>Ranjith Kumar Sivakumar\*, <sup>2</sup>Manoj Kumar Karmakar, <sup>2</sup>Cheuk Man Cheung. <sup>1</sup>Anaesthesia and Intensive Care, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong; <sup>2</sup>Anaesthesia and Intensive Care, The Chinese University of Hong Kong, Shatin, Hong Kong

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**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

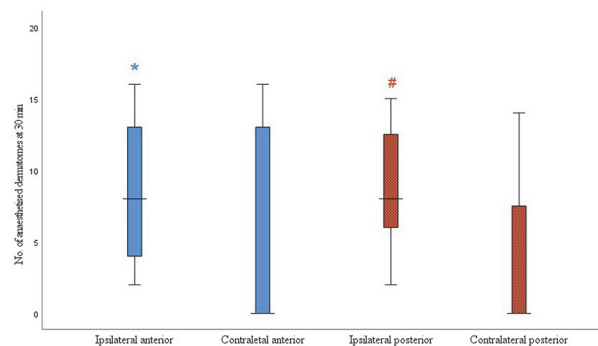
**Background and Aims** This study evaluated sensory block dynamics of the recently described intertransverse process block (ITPB) at the retro-SCTL space.

**Methods** After ethics approval and informed consent, 11 patients aged 18-80 years, ASA I-III, scheduled for unilateral video-assisted thoracoscopic surgery received an ultrasound-guided (USG) ITPB at the retro-SCTL space. The ITPB was performed at three levels (T3, T5, T7) and 6 ml of a 1:1 mixture of 2% lignocaine with 1:200,000 adrenaline and 0.5% levobupivacaine was injected at each level. The sensory block was assessed bilaterally, along the midclavicular and mid-scapular line, and from T2 to L3 dermatomes using a numeric rating scale (NRS 0-100; 100-normal sensation, 0-no sensation to cold) for 30 minutes after the block and in the

recovery room (RR). All patients received general anaesthesia and a multimodal analgesia regime for postoperative pain relief.

**Results** The USG three-level ITPB at the retro-SCTL space produced bilateral thoracic anaesthesia (figure 1). The median [IQR] number of dermatomes affected on the ipsilateral and contralateral thorax is presented in figure 1. Significantly more dermatomes, both anterior ( $p=0.01$ ) and posterior ( $p=0.02$ ), were affected on the ipsilateral than the contralateral thorax. In the RR, the sensation of cold over the thorax had returned to an NRS

$>50/100$ , bilaterally, in the majority of patients (91%). Nevertheless, all patients remained comfortable.



**Abstract #36380 Figure 1** Thoracic dermatomal anaesthesia after a multilevel intertransverse process block at the retro-SCTL space. Data are presented as a median [IQR]

**Conclusions** A multilevel ITPB at the retro-SCTL space produces bilateral thoracic anesthesia but more dermatomes are affected over the ipsilateral than contralateral thorax. Future research to evaluate its anaesthetic and analgesic potential is warranted.

**Attachment** CREC approval (2021.560).pdf

### #35834 REGIONAL ANESTHESIA FOR ADVANCED SKIN CANCER SURGERY AND FREE FLAP RECONSTRUCTION IN FRAGILE PATIENTS

Costa Fabio\*, Alessandro Ruggiero, Giuseppe Pascarella, Luigi Maria Remore, Stefania Tenna, Marco Morelli Coppola, Laura Pierantoni, Felice Eugenio Agrò. *Campus Biomedico University Hospital Foundation, Rome, Italy*

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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)

**Background and Aims** Compared to general anesthesia, regional anesthesia (RA) with sedation is safer for elderly patients with comorbidities, especially for long-duration procedures. Our institution established an Integrated Care Pathway (ICP) for advanced skin cancer, managing 102 cases over the last four years. Among them, 79 underwent surgical excision. Reconstruction required free flap in 20 cases and regional flap in 46. All patients received targeted RA techniques. We report a case series of four elderly and fragile patients who underwent free flap reconstruction under targeted blocks and mild sedation.

**Methods** Four patients with skin cancer underwent wide excision and reconstruction. 1- latissimus dorsi muscle flap: combined erector spinae plane, deep- serratus plane, and pectoro-serratus plane blocks. 2- vastus lateralis flap: spinal anesthesia 3- superficial circumflex iliac perforator flap: spinal anesthesia These flaps were transferred to the parieto-occipital, fronto-temporal, and temporo-auricular regions, with the superficial temporal used as recipient vessels. Combination of supratrochlear, supraorbital, auriculotemporal, occipital nerves, and cervical plexus block allowed to manage the recipient site. 4- lateral arm flap: axillary brachial plexus block Transferred to the dorsum of ipsilateral hand with anastomoses to the dorsal branch of the radial artery and cephalic vein.

**Results** mean age was 82.8 years; mean operative time was 4h47'. No patient required transfer to the intensive care unit; no flap loss was observed. Mean time to discharge was 4.5 days.



**Abstract #35834 Figure 1** Latissimus dorsi free flap harvesting planning

**Conclusions** Free flap transfer under RA is advisable for fragile patients, avoiding intensive care and hastening recovery and discharge. Thorough planning, tailored RA and collaboration between surgeon and anesthesiologist are crucial.

## Ask the expert session

### #36942 NEUROLOGICAL COMPLICATIONS AND INFECTIONS AFTER NEURAXIAL ANALGESIA DURING LABOR

Hector J Lacassie\*. Anesthesiology Department, Pontificia Universidad Católica de Chile, Santiago, Chile

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While neuroaxial analgesia and anesthesia are generally safe, adverse events can occur. In obstetrics, the situation is even safer, mainly because it involves young women who are

usually healthy and without neuroaxis abnormalities that may increase the risk of accidents or adverse events.

The most feared neurological complications associated with anesthesia in the neuroaxis are primarily epidural expansive processes (hematomas or abscesses), neuroaxial infections (epidural abscesses or intrathecal infection), and direct neural injuries. These types of events are very rare, so their risk estimation is based on small studies, case reports and indirect evidence.

It is highly desirable for anesthesiologists to have a detailed understanding of potential sources of complications, their prevention, progression, treatment, and prognosis. The objective of this article is to review the characteristics of intrinsic obstetric neuropathies, nerve injuries related to neuroaxial anesthesia, and the evaluation and management of postpartum manifestations suggesting a nerve injury.

**Intrinsic obstetric neuropathies** Obstetric neuropathies caused by pregnancy and childbirth are the most common cause of neurological symptoms in obstetrics and occur in up to nearly 1% of women after delivery. These are attributed to pregnancy, labor, and the delivery itself. They often manifest as sensory or motor symptoms, involve multiple lumbosacral nerve roots, and generally resolve within a short period of time (6 to 8 weeks). Risk factors identified for these neuropathies include nulliparity, prolonged labor, and the use of forceps.

The territories that are commonly injured during the childbirth process include the lumbosacral plexus, femoral nerve, obturator nerve, common fibular nerve, lateral femoral cutaneous nerve, and sciatic nerve. These injuries are usually due to neuropraxia during fetal presentation, forceps delivery, and inappropriate patient positioning.

**Intrapartum lumbosacral plexopathy and common fibular neuropathy** The lumbosacral plexus, originating from the L4-S4 nerve roots, can be damaged by compression of the lumbosacral trunk (L4-5) against the sacral wing. Risk factors include short stature, large fetus, prolonged labor, and the use of forceps. The typical presentation is foot drop and hypoesthesia on the lateral aspect of the leg and dorsum of the foot, symptoms that are similar to compression of the sciatic nerve in the thigh or the more distal common fibular nerve. The common fibular nerve can be compressed during patient positioning for delivery, resulting in neuropraxia against the fibular head.

Nerve conduction studies can help determine the level of the lesion; however, a thorough medical history and focused physical examination allow for a highly accurate diagnosis in most cases.

**Femoral neuropathy** The femoral nerve (L2-3-4) can be injured during vaginal delivery and cesarean section. Femoral nerve palsy has been attributed to strong flexion of the thighs against the abdomen with abduction and external rotation of the hips, which presumably compresses the femoral nerve against the inguinal canal. It is the second most common neuropathy in pregnancy. Symptoms of femoral nerve palsy will depend on the exact site of the injury but may include limited thigh flexion, loss of quadriceps strength, absent or reduced patellar reflex (the most reliable objective sign of femoral neuropathy, and hypoesthesia in the anteromedial aspect of the thigh. The function of the adductor muscles, which are dependent on the obturator nerve and share the same nerve roots (L2-3-4) as the femoral nerve, will be preserved. This allows for a differential diagnosis to determine whether the injury involves the nerve or the nerve roots.