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UPDATE ON PECS BLOCK

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The Pecs II targets the interfascial plane between the pectoralis major muscle and the pectoralis minor muscle as does the Pecs I but also targets the interfascial plane between the pectoralis minor muscle and the serratus anterior muscle, aiming to block intercostal nerves 3 to 6, intercostobrachial and the long thoracic nerves, all of which are necessary for axillary node dissection.¹

A recent meta-analysis included 14 different randomized trials looking at Pecs II block versus paravertebral blocks. They found that Pectoralis-II reduces pain intensity and morphine consumption during the first 24 h postoperatively when compared with systemic analgesia alone; and it also offers analgesic benefits non inferior to those of paravertebral block after breast cancer surgery.²

Serratus Anterior Plane Block and Pecs II fascial plane blocks are equally efficacious in post-thoracotomy pain management compared with intercostal nerve block, but they have the additional benefit of being longer lasting and are as easily performed as the traditional intercostal nerve block.³

In open heart surgery, parasternal block provided longer block duration with lower postoperative pain and sedation scores than the PECS II block, with lower cumulative morphine consumption.⁴

Dexamethasone 8 mg when added to ropivacaine 0.2% for PECS II block in unilateral radical mastectomy was not found to reduce total opioid consumption over 72 postoperative hours or to prolong duration of analgesia as compared to pure ropivacaine 0.2%.⁵

Neshith Govil et al demonstrated that instillation of lignocaine to block the pectoral nerves allows better postoperative analgesia compared to other patients without regional anaesthesia and decreases the secretion of angiogenesis markers, which contributes to tumor generalization.⁶

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PROSPECT GUIDELINE FOR PAIN MANAGEMENT AFTER HIP FRACTURE REPAIR SURGERY: A SYSTEMATIC REVIEW AND PROCEDURE-SPECIFIC POSTOPERATIVE PAIN MANAGEMENT RECOMMENDATIONS

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Hip fracture is associated with moderate-to-severe pain, both pre- and post-operatively. Emergent or semi-emergent surgical repair is considered mandatory in most cases. The patients are usually elderly, often with comorbidities and frequently suffer from some blood-loss or hypovolemia caused by fracture and immobility. Perioperative delirium may occur in up to 50% of the patients. The aim of this systematic review was to develop recommendations for optimal pain management after hip fracture. A systematic review utilising the PROSPECT methodology was undertaken. Randomised controlled trials, systematic reviews and meta-analysis published in the English language between 04 April 2005 and 12 May 2021, evaluating the effects of analgesic and anaesthetic interventions were retrieved from MEDLINE, Embase and Cochrane Databases. A total of 60 studies met the inclusion criteria. For patients having hip fracture, adequate analgesic treatment should be initiated as needed pre-operatively and repeated or continued post-operatively. Paracetamol and non-steroidal anti-inflammatory drugs or cyclooxygenase-2 specific inhibitors are recommended. A single shot femoral nerve block or a single shot fascia iliaca compartment block is recommended. The choice between femoral nerve block or a fascia iliaca compartment block should be made according to local expertise. The post-operative regimen should further include scheduled 'round-the-clock' paracetamol and non-steroidal anti-inflammatory drugs or cyclooxygenase-2 specific inhibitors with opioids used for rescue. Potential contraindications in this fragile patient population should be considered carefully. Some other interventions, although effective, carry risks and consequentially were omitted from the recommendations in routine cases, while others were not recommended due to insufficient, inconsistent or lack of evidence. Hip arthroplasty will often be the surgical procedure relevant for hip fracture and has been studied recently by the PROSPECT group. Intrathecal morphine, local infiltration anaesthesia and dexamethasone were then recommended in the elective arthroplasty setting, in addition to those recommendations retrieved from the literature on hip fracture surgery.