consist primarily of local anesthetic systemic toxicity. Since substantial doses are considered necessary, there is a clinically significant risk for local anesthetic systemic toxicity, as with any high-volume fascial block. For this reason, patients need to be monitored according to American Society of Regional Anesthesia guidelines with Intralipid available at all times.

Some meta-analysis demonstrates that ESP is effective in reducing postoperative pain intensity and postoperative opioid consumption in spine surgery. Furthermore, ESP is easy to perform and has few complications. Therefore, for the management of postoperative pain following spine surgery, preoperative ESP is a good choice. More studies are still needed in order to explore doce.

Both the ESPB and TLIP blocks have shown to provide adequate analgesia after lumbar spinal surgery. Clinicians can choose either the TLIP block or the ESPB for pain control after lumbar spinal surgery based on their clinical experience and choice. Currently there is no consensus as to the superiority of one over the other.

Retrolaminar block (RLB) was first reported in 2006 as an alternative approach to PVB. RLB is performed with US imaging or the landmark technique. The needle is inserted at a puncture site 1–1.5 cm lateral to the target spinous process and advanced caudally or cranially until it contacts the lamina. Local anesthetics are injected on the lamina at doses of 20–30 ml. RLB can be performed with the US-guided, in-plane insertion technique. The sagital plane with a linear US probe allows for visualization of the laminae or transversus process, and the needleis advanced using the in-plane technique.

The retrolaminar block has been successfully used in spinal surgery, although the large number of publications that we have on the ESP block have left this approach relegated.

Although everything indicates that regional techniques will be a fundamental pillar in ERAS protocols for spinal surgery, there is no consensus regarding which is the best technique to control postoperative pain in these patients. More studies are needed to reach definitive conclusions in this regard.

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SP58 BLOCKS FOR HIP SURGERY: CURRENT EVIDENCE & FUTURE PERSPECTIVES

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Hip surgery involves different interventions, such as total hip replacement, hemiarthroplasty, or hip fracture surgery with metal plates or screws. Several of these procedures are associated with severe postoperative pain. Adequate pain therapy facilitates functional recovery and early mobilisation. For total hip arthroplasty a multimodal therapy including non-opioid analgesics, alpha-2 agonists, and regional anaesthesia techniques is recommended to improve postoperative analgesia.[1] Peripheral nerve blocks have been shown to improve pain levels and reduce morphine consumption after hip surgery.[2]

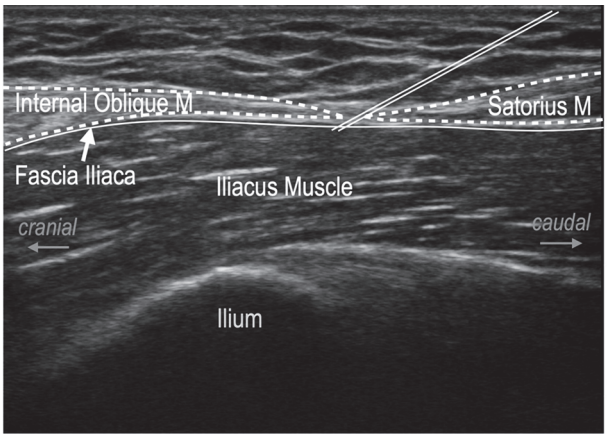
Innervation to the hip joint comes from the lumbar plexus, formed by the divisions of the first four lumbar nerves (L1 – L4), and the sacral plexus arising from the lumbosacral trunk (L4- L5) and the sacral spinal nerves (S1 – S4). The hip capsule is innervated by proximal branches of the femoral nerve, obturator nerve, the accessory obturator nerve (all three from lumbar plexus), the nerve to quadratus femoris, and the sciatic nerve (both from sacral plexus).[3]

Centro-axial techniques provide anaesthesia and analgesia for all types of hip surgery. For elderly patients, spinal or epidural are often considered a safe alternative to general anaesthesia. However, in a recent multi-centre study, spinal anaesthesia was not superior to general anaesthesia with respect to survival and recovery of ambulation at 60 days in older adults undergoing hip-fracture surgery.[4] For postoperative pain treatment epidural analgesia is no longer recommended for hip surgery since the adverse effects, like urinary retention and motor block, outweigh the benefits.[1] The same reservations apply for the proximal block techniques of the lumbar plexus and the sacral plexus. A lumbar plexus block might still be considered in hip revision surgery and in patients where high postoperative pain level is anticipated.[5]

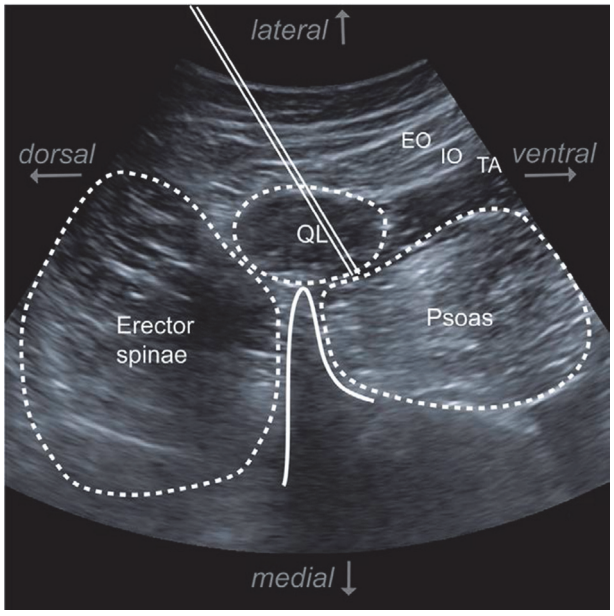
Femoral nerve blocks and fascia iliaca compartment blocks are frequently used for pain treatment after hip-fracture surgery and arthroplasty.[6 7] Compared with a lumbar plexus block, analgesia or anaesthesia will be less complete with these distal block techniques. Yet, distal and superficial block techniques are associated with a lower risk for complications and adverse events. Inserting the needle in a remote distance to the femoral nerve, as done with the fascia iliaca compartment block, might further reduce the risk for nerve damage. Impaired motor function after femoral nerve blocks and fascia iliaca compartment blocks can delay mobilisation and increase the risk of falling after surgery.[8]

As an alternative to the conventional infra-inguinal fascia iliaca compartment block, supra-inguinal techniques have been described.[9] By aiming for a proximal local anaesthetic spread below the fascia iliaca, the lateral cutaneous femoral nerve and the obturator nerve might be anaesthetised in addition to the femoral nerve. High injection volumes are needed to obtain a spread to all target nerves.[10] Figure 1 illustrates

anatomy and needle placement of a proximal supra-inguinal fascia iliaca block as described by Desmet and colleagues.[9]



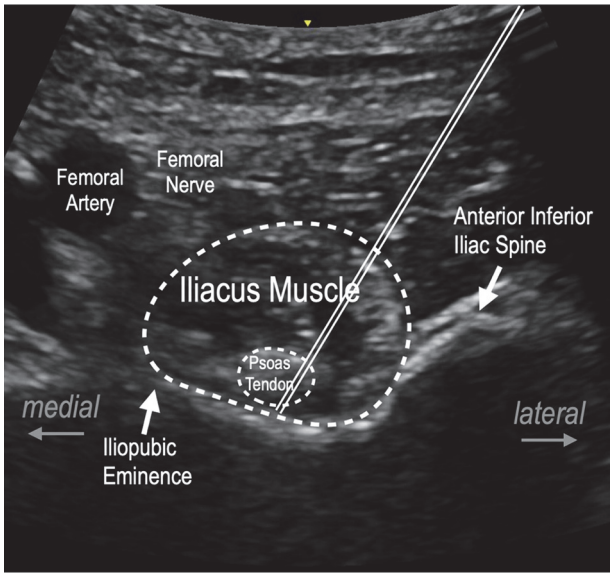
Abstract SP58 Figure 1 Anatomy and needle placement (double line) of a proximal supra-inguinal fascia iliaca block. The local anaesthetic is injected below the fascia iliaca



Abstract SP58 Figure 2 Anatomy and needle placement (double line) of a transmuscular quadratus lumborum block. The local anaesthetic is injected in the fascia plane between quadratus lumborum (QL) and psoas muscle

Quadratus lumborum blocks are frequently used to provide analgesia after abdominal surgery. For a transmuscular quadratus lumborum technique a needle is placed between the quadratus lumborum muscle and the psoas muscle below the fascia transversalis (figure 2). As shown in several clinical studies, transmuscular quadratus lumborum blocks can also provide good analgesia after hip surgery.[11] Impairment of motor function is less pronounced compared to a femoral nerve block. A spread to the lumbar plexus within the psoas muscle, however, cannot be excluded. Technically, a transmuscular quadratus lumborum blocks must be considered as more challenging compared with a femoral or fascia iliaca compartment block.

Pericapsular nerve group (PENG) blocks have been first described in 2018 (figure 3).[12] The block technique aims to anaesthetise proximal branches of the anterior part of the hip capsula, as well as branches of the accessory obturator nerve. Clinical studies indicate that PENG blocks provide efficient postoperative analgesia comparable to a femoral nerve block.[13]Patients treated with PENG blockades have intact motor function. The posterior capsula of the hip joint is not covered by a PENG block. Hence, the technique might be combined with additional block techniques in the future to obtain more complete analgesia.[14]



Abstract SP58 Figure 3 Anatomy and needle placement (double line) of a PENG block. The local anaesthetic is injected below the tendon of the psoas muscle

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SP59 BREAKTHROUGH CANCER PAIN MANAGEMENT: RECOMMENDATIONS AND INTERNATIONAL GUIDELINES

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Pain is a significant problem in patients with cancer. Half of patients undergoing active therapy have pain, more than one-third of cancer patients have pain after curative-intent therapy, and up to two-thirds of patients with advanced or metastatic cancer have pain (Everdingen et al. 2016). Chronic pain is also present in about half of the cancer survivors (Marnangeli et al. 2022).

The etiology of pain in patients with cancer is multifactorial and may be related not only to the underlying cancer but also to comorbidities, cancer therapies, or the psychosocial factors that often accompany chronic or terminal illness.

Breakthrough cancer pain(BTcP), a transient exacerbation of pain that occurs within the context of stable and adequately controlled background pain, is part of this complex problem. (Portenoy et al. 1999)

There is no universally accepted definition to describe breakthrough cancer pain. Additionally, there is disagreement as to what constitutes breakthrough cancer pain (Zeppetella 2009). More recent definitions do not include regular opioid medication or background pain as prerequisites for BTcP(Løhre et al. 2020, Mercadante et al. 2016).

BTP is highly variable, (Davies et al. 2013) with a prevalence ranging from 40% to 80%, (Deandrea et al. 2014) but prevalence rates of 90% have been reported (Zeppetella et al. 2000) and may result from the disease itself, disability caused by cancer, anticancer treatment or other factors. It usually has a rapid onset - that is, a time to peak severity of 5–30 min, but with a wide range extending to1 hour (Caraceni et al. 2004). Its duration is often shortlasting and<60 min but may last for >3 hours.

The differences reported are probably because of different settings and meanings attributed to the definition of breakthrough pain. In an international survey of cancer pain characteristics and syndromes, large differences in the diagnosis of breakthrough pain by clinicians of different countries have been found, suggesting that this phenomenon is diagnosed differently in various countries (Caraceni et al 1999). These controversial aspects, both semantic and clinical, were discussed in a consensus meeting of an expert working group from the Research Network of the European Association for Palliative Care during the 2nd International and Hellenic Conference on Pain Relief and Palliative Care (PA.RH.SYA) held in Athens in March 1999. (Mercadante et al. 2002)

BTcP may be nociceptive, neuropathic or a mixture of both. (Vadalouca et al. 2012)

Cancer BTP is often severe and can greatly interfere with all aspects of daily living.

One of the biggest problems with breakthrough cancer pain is its underassessment, and it is therefore underrecognized and undertreated. Pain assessment usually consists of questions about pain location, intensity, quality, and temporal factors. However, a lack of standardized assessment approaches exists for breakthrough cancer pain (Brant and Stringer 2018).

Clinical Practice Guidelines (CPGs) are statements that include recommendations intended to optimize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options. **Recommendations are the core components of CPGs and should be presented as clear, specific and actionable statements.**

Several Clinical Practice Guidelines (CPGs), consensus statements, and recommendations currently exist for the diagnosis and management of breakthrough cancer pain (BTcP).

Generic Cancer Pain Guidelines providing recommendations about the management of BTcP, have been developed by: the European Association of Palliative Care (Caraceni et al. 2012) European Society for Medical Oncology (Ripamonti et al. 2012), the Cancer Council Australia (Cancer Guidelines Wiki), the Japanese Society Palliative Medicine (Yamaguchi et al. 2013), the Ministry of Health and Welfare and National Cancer Center South Korea, the National Comprehensive Cancer Network (2016).

Specific BTcP Guidelines were also generated by: the Association for Palliative Medicine of Great Britain and Ireland (Davies et al. 2009), the EAPC (Mercadante et al. 2002), the European Oncology Nursing Society (Wengström et al. 2014), the Sociedad Espanola del Dolor (Escobar Álvarez et al. 2013), an international pharmaceutical company-sponsored experts team in BTcP (Caraceni et al. 2013), the German Pain Society, the Italian Oncologic Pain Survey expert group (Mercadante et al. 2016), a meeting that produced the Canadian recommendations (Daeninck et al. 2016), and an interdisciplinary group of Spanish pain experts (López Alarcón et al. 2019).

French guidelines also discuss the use of the so-called rapid-onset opioids (ROOs) for BTcP(Poulain et al. 2012).

A recent systematic review of the above specific BTcP and international generic cancer pain guidelines concluded that current guidelines agree on many aspects of the management of BTcP. However, the evidence to support current guidelines remains low grade, and so more research is needed in this area of care. Moreover, there needs to be an international consensus on the definition and diagnosis criteria of BTcP. (Davies et al. 2018)

Also, this year a quality appraisal of CPGs has been performed for the diagnosis and management of BTcP using the Appraisal of Guidelines for Research and Evaluation (AGREE II) tool. Scaled domain scores were generated and the threshold used for satisfactory quality was >60%. Additionally, intraclass correlation coefficients (ICC) were calculated to determine level of agreement between reviewers.

Eleven guidelines were selected for final evaluation. Only one guideline was classified of 'average' quality while the rest were classified as 'low' quality. The 'Editorial Independence' (70.46 ± 35.7) and 'Scope and Purpose' (64.78 ± 12.5) domains received the highest mean scores, while the 'Applicability' (32.58 ± 13.5) and 'Rigor of Development' (35.04 ±