Postoperative total knee arthroplasty (TKA) pain is severe and can inhibit patients' rehabilitation. We devised a single injection motor sparing knee block (MSB) by targeting the adductor canal and lateral femoral cutaneous nerve with a tunnel placement technique.

Injuries to the peroneal nerve, located in the lateral compartment of the leg, are common and can cause significant disability. This chapter presents the anatomy, differential diagnosis, clinical presentation, and management of peroneal nerve injuries. It includes a detailed discussion of the surgical approaches for peroneal nerve releases and nerve transfers.

The adductor canal is a potential space in the leg that is bounded by the adductor longus and vastus medialis muscles. Blockade of the adductor canal has been shown to be effective for pain control after knee surgery, particularly for knee arthroscopy. This chapter provides a comprehensive guide to the adductor canal block, including its indications, techniques, and potential complications.

Ultrasound-Guided Adductor Canal Block: With Two Different Concentration of Bupivacaine in Arthroscopic Knee Surgery, Controlled Randomised Prospective Study.

This chapter describes a controlled, randomized, prospective study comparing two different concentrations of bupivacaine for adductor canal block in patients undergoing knee arthroscopy. The study included 100 patients and was conducted in a single center. The main outcome measure was the time to first rescue analgesia, defined as the time from block placement to the first dose of rescue analgesia. The study found that the lower concentration of bupivacaine was effective for pain control after knee arthroscopy, with a lower incidence of adverse effects.

Essentials of Trauma Anesthesia

This book is a comprehensive guide to the management of trauma patients, focusing on the principles and techniques of trauma anesthesia. It covers a wide range of topics, including airway management, pain control, and regional anesthesia. The book is intended for anesthesiologists and intensivists who care for trauma patients.

The book begins with an overview of trauma anatomy and pathology, followed by chapters on the management of specific trauma scenarios, such as head injuries, spinal injuries, and extremity injuries. Each chapter is divided into sections on anatomy, pathophysiology, management, and outcomes. The book also includes a section on guidelines and standards for trauma care.

Essentials of Trauma Anesthesia includes more than 1500 images of unsurpassed quality, most of which have never been published, including scanning electron microscopy images of neuronal ultrastructures, macroscopic sectional anatomy, and three-dimensional reconstructions. The text is enhanced with numerous tables and 300 illustrations showcasing techniques of airway management, shock resuscitation, echocardiography and use of ultrasound for the performance of regional anesthesia.
The management of pain from acute injuries is a priority in trauma care. Regional analgesic techniques are very effective at treating acute pain and are gaining in popularity as recognition of their beneficial effects on morbidity increases. Regional analgesia in trauma employs multiple nerve blocks. It involves administration of local anesthetic agents through catheters placed near the site of injury to block the transmission of pain signals. These blocks can provide pain relief while minimizing the use of systemic opioids. Regional analgesia can be used as an adjunct to systemic analgesics or as the sole form of pain management.

The success of regional analgesia in trauma relies on the accurate identification of the appropriate anatomical targets and the use of precise techniques to ensure effective analgesia. The management of pain in trauma patients involves a multidisciplinary approach, with anesthesiologists, surgeons, and other healthcare professionals working together to achieve optimal pain control. The use of regional analgesia in trauma care has become a standard practice, improving patient outcomes and reducing morbidity and mortality.