

analgesia. Today, lumbar square nerve blocks (LSB) have proved to be an effective method of postoperative analgesia. The aim of our study is to compare CB with LSB in the surgical treatment of inguinal hernia and testicular ectopia in children.

Methods Materials and methods: This was a prospective, randomized, double-blind study comparing the postoperative analgesic efficacy of caudal block versus BCL in pediatric patients who had undergone surgery for inguinal hernia and testicular ectopia under general anesthesia. Sixty children were included, and demographic characteristics, use of intravenous analgesics, complications, FLACC score at H1,2,6 and 12 hours postoperatively, and parental satisfaction by Likert score were collected.

Results Results: 60 patients were included, thirty in each group. there were no significant differences between groups in demographic data ($p > 0.05$). The need for intravenous analgesics for the first 12 hours postoperatively was significantly lower in the LSB group ($p = 0.002$). FLACC scores over 12 hours were significantly lower in the LSB group (H2 and H12 respectively $p = 10^{-3}$, and $p = 0.02$). Parental satisfaction scores were higher in the LSB group ($p = 0.0112$).

Conclusions Conclusion LSB may be a promising alternative in pediatric anesthesia.

#34740 ASSESSMENT OF THE PREEMPTIVE MIDAZOLAM ON HEADACHE AND MYALGIA AFTER ELECTROCONVULSIVE THERAPY COMPARED TO A CONTROL GROUP

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Background and Aims Electroconvulsive therapy (ECT) is a controlled electrical stimulus that affects central nervous system and leads to convulsion. Such as every other medical procedure, electroconvulsive therapy has some side effects like headache and myalgia. Patient undergoing electroconvulsive therapy receives different anesthetic drugs and some drugs like Midazolam, Atropine etc. to reduce side effects.

Methods This study included 40 patients who were candidates for receiving electroconvulsive therapy. By using convenience sampling, patients were divided into 2 groups of 20 people. Midazolam were given to one group while the other received placebo. Two patients in midazolam group were removed because of short period of convulsion (lower than 20 seconds). The collected data were analyzed using independent t and chi-square tests.

Results 16 men (42.1%) and 22 women (57.9%) were studied. The incidence of headache ($P < 0.001$), myalgia ($P = 0.014$) and vomiting ($P = 0.011$) was significantly higher in witness group. The incidence of coughing and laryngospasm was not significantly different between the two groups ($P > 0.050$).

Conclusions Midazolam can reduce convulsion time but in most cases, convulsions last more than 25 seconds, which is in therapeutic range. So, it cannot affect the therapeutic value

of electroconvulsive therapy. Preemptive midazolam reduces Post-electroconvulsive-therapy headache and myalgia.

#36506 COMPARATIVE REVIEW CAUDAL VS GENERAL ANESTHESIA IN PEDIATRIC SURGERY

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Background and Aims Epidural anesthesia is established as a standard in global medical practice. Caudal anesthesia is a specific case of epidural anesthesia, with proven effectiveness in various surgical interventions aimed at perioperative pain management. Evaluation of the effectiveness is based on pain assessment scales, intraoperative opioid use, and postoperative need for analgesics.

Methods Detailed literature review on the history, techniques, benefits, and complications of caudal and general analgesia in pediatric patients. Development of a protocol for selecting patients suitable for these types of anesthetic technique. The study included patients in the age group of 0-7 years scheduled for elective and emergency surgical interventions suitable for both techniques. Statistical analysis of the obtained results.

Results The provided results for caudal anesthesia in the pediatric population from the Clinic of Pediatric Anesthesiology and Intensive Care, University Hospital 'N.I. Pirogov,' confirm the described results in the literature review on the topic – circulatory stability, high effectiveness of postoperative pain management, reduced need for analgesic drugs postoperatively compared to the data from the general anesthesia group patients.

Conclusions Caudal anesthesia in pediatric patients is relatively safe, with minimal complication rates when properly executed within the indications for this type of anesthesia and preoperative analgesia – effective pain management and reduced psycho-emotional stress, improved quality of hospital stay, decreased opioid requirements, reduced consumption of analgesic drugs postoperatively. With qualified personnel and well-equipped facilities for both execution and management of potential complications, caudal anesthesia becomes the 'gold standard' for the pediatric population.

Attachment Ethic Committee, CaudalvsGeneral.pdf

#35933 LONG TERM EFFECTS OF OPIOID USE PERIOPERATIVE/ POSTOPERATIVE ON PEDIATRIC PATIENTS

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Background and Aims Opioid use in the pediatric surgical setting has been successful in pain management. It's clear that they reduce pain, bring faster extubation, and shorter ICU stay. Their analgesic effect outweighs their adverse side effects. Prescription drug monitoring has focused on adult patients leaving limited investigation effects during their neurodevelopmental period. Our aim is to examine opioid use in the pediatric community and their effects on opioid use.

Methods A comprehensive review from six databases was conducted in search of peer-reviewed journals. The journals considered were focused on opioids given in a surgical setting in patients under the age of 18. The research uncovered 10 peer-reviewed articles published from 2018-2022 that were included.

Results An increase of 4.8% of opioid use and refill of prescription was noted. There was an increase of opioids due to their analgesic relief compared to other medications. Opioid abuse has increased from 1999 to 2016 especially within the 15 to 19 years and the 0 to 4 years population. There was a decrease in use when prescriptions were limited to five days and the patient had a longer hospital stay. There was also evidence to show a risk of neurotoxicity in younger patients with the use of opioids at a younger age.

Conclusions Opioid pediatric deaths have increased in the last few years. There is still limited information on opioid effects. Future research should focus on longitudinal research of opioids in pediatrics. Identifying alternative types of pain management and at-risk patients to addictions is beneficial towards public health.

#35710 **QUADRATUS LUMBORUM BLOCK (QLB-1) IN A 14-YEAR-OLD PATIENT FOR MAJOR LAPAROTOMY OF A GIANT DYSGERMINOMA**

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Background and Aims Tumors of the gynecological system are rare in childhood and adolescence, and malignant tumors are even rarer. However, mixed mesodermal tumors such as dysgerminoma and teratoma are much more common in children than in adults. Children are more reluctant to pain after major laparotomy.

Methods We present a 14-year-old girl with a giant dysgerminoma. The clinical examination and laboratory tests revealed a pelvic tumor (26X18X12) and elevated cancer markers that both suggest malignancy. At the same time, swollen intraperitoneal lymph nodes and a large ascites collection are found without, however, the existence of metastases in other organs. After an oncological meeting, surgical excision of the tumor

was decided and the histopathological study revealed stage T1C3 dysgerminoma. In the operation room, the girl received general anesthesia, and before awakening, a bilateral quadratus lumborum block was performed under ultrasound guidance. Post-operative pain assessment with the NRS scale, showed a satisfactory level of analgesia even 20 hours after the block thanks to the use of dexamethasone and without the use of additional analgesic agents. One week later, the patient was transferred to the Pediatric Oncology Clinic for further treatment.

Conclusions Ultrasound-guided quadratus lumborum block provides children, as well as adults, prolonged post-operative analgesia and reduced use of adjuvant analgesics without clinical side effects.

Attachment Quadratus lumborum block.docx

#36327 **SCIATIC NERVE BLOCK UNDER DIRECT VIEW AS ANALGESIC SUPPLEMENT IN A 13 YEAR OLD PATIENT WITH CEREBRAL PALSY THAT UNDERWENT FEMORAL TENDON LENGTHENING**

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Background and Aims Orthopedic surgery is common in paediatric patients with cerebral palsy, aiming in increasing mobility and reducing muscle spasms. Postoperative pain control is often challenging due to coexisting conditions

Methods A 13 year old male patient was scheduled for femoral tendon lengthening. The child had been born as a premature neonate at 34 weeks of gestation, and had undergone Achilles tendon lengthening also in the past. After induction of general anaesthesia, an initial plan for popliteal block was abandoned due to U/S resources unavailability at particular moment. Intraoperatively and while patient was at the prone position, the sciatic nerve was visible at the popliteal level, thus we decided for sciatic blockade under direct view. 10 ml of Ropivacaine 0.2% were injected perineurally. Fentanyl (5 micrograms/kg), Paracetamol, Dexamethasone, Diclofenac sodium and Morphine were given additionally. The patient woke up referring no pain in post anaesthetic unit, while in the ward only the standard dose of paracetamol was administered

Results After tendon lengthening postoperative muscle spasms may cause severe pain, and adequate pain control is often complex due to coexisting conditions. Popliteal nerve block has been shown to reduce the analgesic use in postoperative period. In this patient popliteal block was not possible. So, a perineural infiltration at the popliteal level under direct view was an analgesic supplement