pediatric cleft lip and palate surgery for determining the efficacy of different doses of Fentanyl.
Methods: 40 children aged 3 mo-3 yrs were divided in 2 groups randomly (n = 20) after induction of general anesthesia with Thiopental 5 mg/kg, Lidocaine 1 mg/kg, Midazolam 0.2 mg, Patients received 3μ/kgfentanyl in group A, and Fentanyl 1μ/kg + Acetaminophen rectal 20 mg/kg in group B, repeated doses of rectal Acetaminophen was 10 mg/kg/2 h. Intra operative pain was measured with change of vital signs from base and need to increase of halothane percentage.
Results: Vital signs were more stable in group B than group A ($P > 0.05$). There was a need to increase halothane percentage during surgery in group A, rather than group B ($P < 0.05$).
Conclusion: We conclude that low dose Fentanyl + repeated rectal Acetaminophen provides more effective analgesia and less side effects in children.

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CAUDAL BUPIVACAINE AND COMBINATION OF BUPIVACAINE AND NEOSTIGMINE IN POSTOPERATIVE ANALGESIA AFTER UNDER UMBILICAL SURGERIES IN CHILDREN

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Background: In a randomized, double blind study; we examined postoperative analgesic effect of caudal Bupivacaine, and Bupivacaine plus Neostigmine in under umbilical surgeries of children under 12yrs.
Methods: After induction of GA, 60 patients divided in 2 groups randomly, (n = 30). In group A, caudal block was done with Bupivacaine 0.25% 1 ml/kg, and in group B, Bupivacaine 0.125% 0.5 ml/kg + Neostigmine 1 m/kg in normal saline 0.5 ml/kg. Postoperative pain was assessed with objective pain score. (Score $\geqslant$4, received rectal Acetaminophen 15–20 mg/kg).
Results: Vital signs in early recovery period (first 2 h), were stable in 2 groups and there was no significant difference between them ($P > 0.05$). Patients in group A, received more doses of rectal Acetaminophen during first 24 h than group B, (pain score $\geqslant$4), $P < 0.001$.
Conclusion: We conclude that mixing of Neostigmine with local anesthetics not only provides better analgesia during postoperative period, but also we can reduce the concentration of LA.

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EFFICACY OF LORNOXICAM AND TRAMADOL FOR PAIN CONTROL DURING TRANSRECTAL PROSTATE BIOPSY

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Background and Aims: We compared the efficacy of lornoxicam and tramadol to provide analgesia and comfort during transrectal ultrasound guided biopsy of the prostate (TRUSP) as a noninvasive method.
Methods: A total of 62 men undergoing TRUSP were enrolled in this study. Patients were randomized into 3 groups. Group 1 (n = 21) received 8 mg of lornoxicam, Group 2 (n = 21) received 100 mg of tramadol and Group 3 (n = 20) received saline as a control. The drugs were given intramuscularly half an hour prior to the procedure. All patients were asked to indicate the level of pain by visual analog score (VAS) and their comfort level were described. Moreover, the patients were asked for undergoing to a future TRUSP.
Results: The data obtained, revealed that both experimental groups receiving lornoxicam and tramadol have lower VAS score compared to control group (3.4, 2.4 vs 6.4 respectively, $p < 0.0001$). There were also significant difference in VAS scores between Group 1 and Group 2 ($p = 0.027$). There was significant difference at comfort score between drug groups and control ($p > 0.0001$) and between lornoxicam and tramadol group ($p < 0.05$). Pain and discomfort were least in tramadol group. The percentage of patients who would not consent to future TRUSP was lower in drugs groups compared to control ($p < 0.0001$). But there were not any differences between drug groups.
Conclusions: Lornoxicam and tramadol are more practical, effective and comfortable when compared with control group in TRUSP for pain relief. In addition, tramadol was more effective than lornoxicam.

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PREVENTING PAIN ON INJECTION OF ETOMIDATE: COMPARISON OF DEXMEDETOMIDINE AND FENTANYL

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Background and Aims: Dexmedetomidine and other alpha-agonists are known to interrupt nociceptive processing in the periphery, in the spinal cord, and in supraspinal sites [1]. We conducted a study to determine the efficacy of dexmedetomidine in comparison with fentanyl in decreasing pain due to injection of etomidate.
Methods: Eighty-four patients were randomly divided into two groups. Patients had a peripheral iv route with 20 G catheter. Patients received dexmedetomidine 0.04 μg. kg-1 iv (Group D), or fentanyl 1.5 μg.kg-1 iv (Group F). The drugs diluated 10 mL saline and infused during 4 min. One minute later, etomidate 0.3 $mg \cdot kg^{-1}$ was injected over 90 second. The anesthesiologists inquired about injection pain while infusing the etomidate. The pain was graded using a 4-point scale (0: no pain, 1: mild pain, 2: moderate pain, 3: severe pain).
Results: There were no significant differences between groups with respect to demographic data. Pain scores are shown in the Table. We found no differences between groups for pain scores ($p > 0.05$). No side effects were observed.
Distribution according to intensity of pain

Pain score	0	1	2	3
Group D (n = 42)	33 (78.5%)	7 (16.6%)	2 (54.7%)	–
Group F (n = 42)	39 (92.8%)	3 (7.1%)	–	–

Conclusions: Previous reports have shown that injection pain with etomidate is high (80% incidence) and if use pretreatment with fentanyl reduced the incidence of pain significantly. We shown that dexmedetomidine is reduced injection pain like fentanyl.

References

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BENEFITS OF AN ADD-ON TREATMENT WITH THE SYNTHETIC CANNABINOMIMETIC NABILONE ON PATIENTS WITH CHRONIC PAIN-A RANDOMIZED CONTROLLED TRIAL

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Objective: The aim of this study was to investigate the efficacy and efficiency of an add-on treatment with the synthetic cannabinomimetic nabilone on patients with chronic pain. Of major interest were the evaluation of the influence the treatment had on pain and on quality of life.
Methods: The placebo-controlled double-blinded pilot study was divided into a 14 week cross-over period (two 4 week medication phases plus wash-out phases) followed by a 16 week medication switch period. The principal inclusion criterion was chronic therapy-resistant pain in causal relationship with a pathologic status of the skeletal and locomotor system.
Results: Altogether, 30 patients were included. From the results, it is obvious that throughout the cross-over periods the nabilone treatment was superior (medians [25%-; 75%-percentiles]: nabilone/placebo): decrease of the average spinal pain intensity within the last 4 weeks (DVAS)