Indian Journal of Basic and Applied Medical Research; June 2016: Vol.-5, Issue- 3, P. 239-247

**Original article  
Caudal neostigmine with bupivacaine for postoperative analgesia in pediatric patient: comparison with bupivacaine alone.   
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**Abstract**

Background: The use of caudal block in children was extensively reviewed by Kay in 1974.Its advantages are postoperative pain relief,decrease need for narcotic and non-narcotic analgecics,early feeding ,early ambulation,less risk of chest infection,more rapid return of child's bright and alert state and early discharge from hospital.

Material Method: We studied 75 children, ASA physical status 1 or 2, aged 2-10 yrs., undergoing elective surgery below the level of umbilicus. Patients were allocated randomly to one of the three groups (n=25).Group B received caudal Inj.of 0.25% bupivacaine 1ml/kg, Group BN1 received 0.25%bupivacaine 1ml/kg with Neostigmine 1mcg/kg, Group BN2 received 0.25% bupivacaine 1ml/kg with neostigmine 2mcg/kg. Total volume was kept same in all the groups. HR, BP, RR were monitored continuously intraoperatively and 2 hrs. after surgery in recovery room. Post-operative pain was assessed at 30 min, 2, 4,8,12 and 24 hrs after recovery from anaesthesia using modified objective pain score. A postoperative score ≥ 4 was managed with a paracetamol suppository (15mg/kg), The time at which postoperative rescue analgesia, if any,was first received and number of paracetamol doses per 24 postoperative hrs. were noted.

Result: Time to first rescue analgesic administration was longer in group BN1 and BN2 than group B (P < 0.05). Incidence of side effects .such as nausea / vomiting was not significantly different in all three groups.

Conclusion: We concluded that addition of neostigmine to caudal bupivacaine is associated with prolonged duration of postoperative analgesia without increasing incidences of side effect than caudal bupivacaine alone.