

DISCUSSION

Intrathecal administration of ketamine 20 mg/kg alone produced spinal anaesthesia in all the rabbits in Group II, the duration of which was 50±0.68 minutes and it was consistent. Hiroki et al studied spinal conduction block in dogs. While studying the mechanism of intrathecal ketamine analgesia on intraspinal evoked potential they found dose dependent decrease in the amplitude of Wave I and II. It indicated axonal block by ketamine in dose of 1-5 mg/kg. In the present study ketamine in the doses of 5-20 mg/kg resulted in loss of sensory and motor responses in all the rabbits. As compared with bupivacaine, ketamine was less potent spinal anaesthetic agent with regard to the duration of the spinal anaesthesia is concerned ($p < 0.5$) and there was no significant modification in the duration of spinal anaesthesia with the different percentage combinations of bupivacaine and ketamine ($p > 0.5$).

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REFERENCES

1. Domino, EF; Chidiff, P; et al. Pharmacological effects of CI 581. A new dissociative anesthetic in humans. *Clinical Pharmacology and Therapeutics*. 1965;6:279-291
2. Ahuja, BR. Analgesic effects of intrathecal ketamine in rats. *British Journal of Anesthesia*. 1983;55:991-995
3. Sybbert, JW; et al. Ketamine in the treatment of status epilepticus. *Anesthesiology*. 1983;58:203-209
4. Dowdy, EG; et al. Some pharmacological similarities of ketamine, lidocaine and procaine. *Anesthesia Analgesia*. 1973;52:839-842
5. Hiroki, et al. Spinal conduction block in dogs. *Anesthesia Analgesia* 1994;79:98-104
6. Crisp, T; et al. The local monoaminergic dependency of spinal ketamine. *European Journal of Pharmacology*. 1991;194:167-172

Check-List

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Literature Review

Tobacco habit in northern India. Sandeep Kumar, Upendra Pandey, Nidhi Balal, *JIMA*.2006;104:19-24.

To study tobacco consumption practices in north-India population, a community-based, stratified sampling survey using validated interview schedule was performed in rural/urban areas of Lucknow, Uttar Pradesh. There were 432 tobacco users (385 men, 47 women, 276 urban, 156 rural) taken as subjects. Tobacco use practices i.e. chewing/smoking/rubbing/snuffing, fire control measures were all taken into consideration.

Single mode of tobacco use was reported by 277 subjects (64.1%) and the rest had a plethora of tobacco practices. Chewing was prevalent in 322 (74.5%), smoking in 256 (59.3%), rubbing in 32 (7.4%) and snuffing in 4 subjects (0.9%). Of the 10 preparations in the questionnaire, the "top 5" preferences ranked as tobacco-gutka, cigarette, bidi and khaini that remained unchanged between sexes, rural/urban people and age groups. Women significantly ($p < 0.00001$) preferred smokeless tobacco and perceived social barrier for smoking. Gutka consumption was significantly higher in youngsters (< 25 years, $p < 0.0001$). Most subjects (235, 54.3%) used tobacco 7.24 times/day. Majority (259;60%) users started consuming tobacco before 21 years. The commonest context of tobacco use was with any refreshment (337, 78.0%). Of the 322 tobacco chewers, about half the subjects (178;52.2%) rotated the quid in their mouth, 313 (97.2%) later spat it out, 9 (2.1%) swallowed it and 15 (4.7%) admitted to sleep with quid in mouth. Tobacco along with alcohol was consumed by 82 (19%) and with opium by 33 subjects (7.6%). Social barrier to tobacco use was perceived by 231 subjects (53.5%), especially by smokers. Majority users (355;82.2%) did not have negative feelings of embarrassment in using tobacco. Most users (351,81.4%) said they would welcome legislative control on tobacco use.

Detection of renal function decline in patients with diabetes and normal or elevated GFR by serial measurements of serum cystatin C concentration : results of a 4-year follow-up study. Perking, BA; Nelson, RG; Betsy, EP. *J. Am. Soc. Nephrol.* 2003;6:1404-1412.

The serum concentration of cystatin C has recently been proposed as an endogenous marker of renal function that is accurate even at the low concentrations found when GFR is normal or elevated. Cystatin C is a nonglycosylated basic pro-tease inhibitor that is produced at a constant rate by all nucleated cells. It is freely filtered by the renal glomerulus and primarily catabolized in the renal tubules. Furthermore, levels are reported to be independent of gender, age and body mass. Diurnal variation is insignificant, levels are not altered by inflammatory conditions, and the concentration is stable in stored serum. Thirty participants with type 2 diabetes in the Diabetic Renal Disease Study met these three eligibility criteria GFR > 20 ml/min per 1.73m² at baseline (based on cold iohalamate clearance), 4 year of follow-up and yearly measurements of iohalamate clearance and serum cystatin C. With the use of linear regression, each individual's trend in renal function over time, expressed as annual percentage change in iohalamate clearance, was determined. Serum cystatin C in mg/L was transformed to its reciprocal (100/cystatin C) and linear regression was used to determine each individual's trend over time, expressed as an annual percentage change. In paired comparisons of 100/cystatin C with iohalamate clearance at each examination, the two measures were numerically similar. More important, the trends in 100 cystatin C and iohalamate clearance were strongly correlated (Spearman $r = 0.77$). All 20 participants with negative trends in iohalamate clearance (declining renal function) also had negative trends for 100/cystatin C. Results were discordant for only three participants. In contrast, the trends for three commonly used creatinine-based estimates of GFR compared poorly with trends in iohalamate clearance (Spearman $r < 0.35$). Serial measures of serum cystatin C accurately detect trends in renal function in patients with normal or elevated GFR and provide means for studying early renal function decline in diabetes.

Compiled by Dr. .P.Chattree