Comparison of therapeutic effects of intranasal Desmopressin, Pethidine and their combination in renal colic

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Abstract

Background & Objective: Standard treatment in renal colic is established with narcotics. NSAIDS are alternative choices. Several studies are done on various treatments. This study was done to evaluate the effect of intranasal Desmopressin alone and in combination with parenteral Pethidine in relief of renal colic pain.

Materials & Methods: In this clinical trial study, 150 patients with renal colic were recruited in: Group one received 40 micrograms intranasal desmopressin, group two 25 milligrams intravenous pethidine and in group 3 both drugs were administered. VAS method was used to measure the intensity of pain in first minute and at 10, 20 and 30 minutes after administration. Kruskal-Walis and ANOVA were used to compare the pain severity between groups.

Results: Pain intensity had significant decrease after 10, 20 and 30 minutes; in all groups (P<0.05). Group 3 showed maximum decrease after 30 minutes.

Conclusion: This study determined that combined administration of desmopressin and pethidine can significantly decrease in renal colic intensity. We suggest the use of desmopressin, in combination with other medicines; as a supportive and effective treatment in renal colic patients.

Key Words: Desmopressin, Pethidine, Renal colic, combination therapy, Efficacy

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