#1974 - Evaluation of the Effects of Allopurinol on Metabolic Acidosis in Patients with CKD

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Background: Chronic kidney disease(CKD) is a disabling disease with multiple complications. Increased serum level of uric acid due to glomerular filtration rate (GFR) impairment is an importance and the lack of a similar study In Iran, this study was designed to evaluate the effect of allopurinol on metabolic acidosis in patients with renal failure.

Methods: In this randomised controlled trial (RCT) study, 50 patientswithCKDstage II-IV, who referred to Ghayem Hospital, were selected and randomly divided into two equal groups of 25 subjects. In addition to standard treatments, the intervention group received 100 mg allopurinol tablet for 3 months and the control group received placebo. Demographic data were obtained from each subject.Serum uric acid level, creatinine, pH blood and bicarbonate levels were obtained at the initiation of treatment and at the end of the third month.

Results: The mean age of subjects was 54.04±12.62 years. The most common cause of CKD was Diabetes Mellitus (36.0%). Allopurinol administration resulted in a significant increase bicarbonate and PH(p

Conclusion: Allopurinol may ameliorate metabolic acidosis, glomerular filtration and uric acid in patients with CKD

Keywords: Chronic renal failure; Allopurinol; Uric acid; Metabolic acidosis

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