

**Table 1: Demographic, and clinical comparisons between patients groups**

Parameter	Allopurinol group N=97	Control group N=97	P value
Age (years)	59.35 ± 13.18	59.56 ± 13.41	0.914
Sex (Males)	71 (73.20%)	71 (73.20%)	1.000
Height (cm)	165.05 ± 10.11	164.36 ± 8.43	0.609
Weight (Kg)	89.00 (71.50, 104.50)	82.00 (69.00, 94.00)	0.020
BMI	31.4 (28.05, 37.50)	30.20 (25.55, 34.15)	0.029
<i>Co-morbidities</i>			
Systemic Hypertension	83 (85.57%)	65 (67.01%)	0.002
Pre-diabetes	6 (6.19%)	1 (1.03%)	0.054
Diabetes mellitus type 2	91 (93.81%)	96 (98.97%)	0.054
Ischemic heart disease	27 (27.84%)	25 (25.77%)	0.746
Chronic heart failure	12 (12.37%)	7 (7.22%)	0.227
Cardiac arrhythmias /Atrial fibrillation	8 (8.25%)/6 (6.19%)	5 (5.15%)/3 (3.09%)	0.389/0.306
Transient ischemic attacks/ Stroke	2 (2.06%)/7 (7.22%)	2 (2.06%)/13 (13.40%)	1.000/0.157
Chronic kidney disease	35 (36.08%)	7 (7.22%)	<0.001
Dyslipidemia	57 (58.76%)	53 (54.64%)	0.562
<i>Allopurinol indication*</i>			
Gout	34 (35.05%)	-	-

Asymptomatic hyperuricemia	57 (58.76%)	-	
Renal stones (multiple/recurrent)	2 (2.06%)		
<i>Allopurinol therapy daily dose</i>			
100 (mg/day)	75 (77.32%)	-	
200 (mg/day)	7 (7.22%)	-	
300 (mg/day)	14 (14.43%)	-	
400 (mg/day)	1 (1.03%)	-	
<i>Allopurinol therapy duration (months)</i>	39.50 (10.95, 82.78)	-	
<i>Diabetes related biochemistry</i>			
Glycated hemoglobin (%)	6.90 (6.20, 7.80)	7.30 (6.60, 8.40)	0.010
Fasting blood sugar (mg/dL)**	122.50 (105.88, 142.00)	131.67 (109.42, 166.50)	0.072
<i>Variability of FBS***</i>			
Standard deviation (mean)	19.94	26.47	0.231
Coefficient of variation	14.03%	16.61%	0.256
Variability independent of the mean (VIM)	0.140	0.987	<0.001
<i>Renal biochemistry€</i>			
eGFR (ml/min/1.73m <sup>2</sup> )	70.07 ± 23.91	85.37 ± 28.52	<0.001
BUN (mg/dL)	17.00 (13.00, 23.00)	15.00 (11.00, 19.00)	0.005
Serum creatinine (mg/dL)	1.12 (0.90, 1.41)	0.93 (0.78, 1.15)	<0.001

Uric acid (mg/dL)¥	6.45 ±1.78	5.18 ± 1.51	<0.001
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Abbreviations: BMI: body mass index; FBS: fasting blood sugar; eGFR: estimated glomerular filtration rate; BUN: blood urea nitrogen

Data \* was based on 93 patients; 4 patients had no mentioned indication. 2 patients from those who had gout and 3 from those labeled with asymptomatic hyperuricemia had also multiple/ recurrent renal stones.

Data \*\* based on 94 patients in allopurinol group, and 96 patients in control group;

Data \*\*\* based on 78 patients in allopurinol group, and 79 patients in control group;

Data€ based on 84 patients in allopurinol group; one patient did not have matching renal function tests, and 12 were on renal replacement therapy, and 97 patients in control group

Data ¥ based on 90 patients in allopurinol group, and 34 patients in control group;

**Table 2: Therapeutics comparisons between patients groups**

Parameter	Allopurinol group N=97	Control group N=97	P value
<i>Diabetes mellitus medications</i>			
Insulin	25 (25.77%)	27 (27.94%)	0.746
Sulphonylureas	14 (14.43%)	20 (20.62%)	0.257
Metformin	89 (91.75%)	94 (96.91%)	0.121
Dipeptidyl peptidase-4 (DPP-4) inhibitors	30 (30.93%)	35 (36.08%)	0.447
Sodium Glucose cotransporters (SGLTs) inhibitors	9 (9.28%)	8 (8.25%)	0.800
<a href="#">Glucagon-like peptide-1</a> (GLP-1) agonists	6 (6.19%)	1 (1.03%)	0.054
<i>Other medications</i>			
Angiotensin Converting Enzyme Inhibitors (ACEI)/ Angiotensin Receptor Blockers (ARB)	16 (16.49%)/ 51 (52.58%)	24 (24.74%)/ 35 (36.08%)	0.156/ 0.021
Beta-blockers/ Calcium channel blockers	48 (49.48%)/ 48 (49.48%)	27 (27.84%)/ 27 (27.84%)	0.002/ 0.002
Hydrochlorothiazide/ Furosemide	26 (26.80%)/22 (22.68%)	15 (15.46%)/10 (10.31%)	0.053/ 0.020
Spironolactone	8 (8.25%)	3 (3.09%)	0.121
Aspirin /Clopidogrel			

Statins/Fenofibrate	44 (45.36%)/8 (8.25%)	58 (59.79%)/10 (10.31%)	0.044/0.621
Nitrates	78 (80.41%)/10 (10.31%)	77 (79.38%)/7 (7.22%)	0.858/0.446
Digoxin	8 (8.25%)	7 (7.22%)	0.788
Warfarin	1 (1.03%)	1 (1.03%)	1.000
	1 (1.03%)	2 (2.06%)	0.561

Chi-squared test for association was used for the comparisons