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Increased risk of chronic kidney disease in uric acid stone formers with high neutrophil-to-lymphocyte ratio

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	High NLR (>2.8) (n=169)	Low NLR (≤2.8) (n=167)	P-value
NLR	4.58 (3.46-6.88)	1.87 (1.48-2.36)	
Age (years)	60.3±14.5	60.2±11.5	0.939
BMI (kg/m²)	26.4±4.5	26.1±3.9	0.451
Male (%)	129 (76.3%)	112 (67.1%)	0.059
Overweight (%)	100 (59.2%)	98 (58.7%)	0.927
DM (%)	60 (35.5%)	47 (28.1%)	0.148
HTN (%)	79 (46.7%)	78 (46.7%)	0.994
Dyslipidemia (%)	54/86 (62.8%)	43/58 (74.1%)	0.154
CVD (%)	13/131 (9.9%)	14/137 (10.2%)	0.936
Gout (%)	33/131 (25.2%)	16/137 (11.7%)	0.004
Hyperuricemia (%)	27/65 (41.5%)	30/73 (41.1%)	0.958
Acidic urine (%)	68 (40.2%)	54 (32.3%)	0.132
eGFR (mL/min/1.73 m²)	75.0±41.1	82.8±38.7	0.073
Serum uric acid (mg/dL)	6.8±1.6	6.6±1.9	0.539
Serum CHOL (mg/dL)	172.2±41.5	185.4±39.3	0.057
Serum TG (mg/dL)	133.7±65.6	147.0±101.8	0.345
Serum HbA1c (%)	6.7±1.6	6.2±1.2	0.047

Supplementary Table 1. Clinical characteristics of the stone formers stratified by values below and above the median NLR.

Values are expressed as the number (percent), mean ± standard deviation, or median (interquartile range). BMI: body mass index; DM: type 2 diabetes mellitus; HTN: hypertension; CVD: cardiovascular diseases; CHOL: total cholesterol; TG: triglyceride; HbA1c: Glycated hemoglobin; NLR: neutrophil/lymphocyte ratio.

	Non-uric acid (n=169)	Mixed-uric-acid (n=69)	Pure-uric acid (n=98)	P-value
Age (years)	56.5±11.7	63.1±11.5	64.7±13.1	<0.001
BMI (kg/m²)	25.8±4.1	26.5±3.9	26.7±4.6	0.222
Male (%)	98 (58.0%)	59 (85.5%)	84 (85.7%)	<0.001
Overweight (%)	97 (57.4%)	44 (63.8%)	57 (58.2%)	0.652
DM (%)	47 (27.8%)	21 (30.4%)	39 (39.8%)	0.123
HTN (%)	68 (40.2%)	40 (58.0%)	49 (50.0%)	0.034
Dyslipidemia (%)	45/67 (67.2%)	20/28 (71.4%)	32/49 (65.3%)	0.858
CVD (%)	9/102 (8.8%)	3/68 (4.4%)	15/98 (15.3%)	0.063
Gout (%)	7/102 (6.9%)	14/68 (20.6%)	28/98 (28.6%)	<0.001
Hyperuricemia (%)	11/42 (26.2%)	16/36 (44.4%)	30/60 (50.0%)	0.050
Acidic urine (%)	37 (21.9%)	34 (49.3%)	51 (52%)	<0.001
eGFR (mL/min/1.73 m²)	95.0±41.5	67.1±29.9	59.3±31.6	<0.001
Serum uric acid (mg/dL)	6.2±1.9	6.9±1.6	7.0±1.7	0.055
Serum CHOL (mg/dL)	180.5±40.0	181.3±38.0	177.5±41.0	0.431
Serum TG (mg/dL)	137.2±86.9	139.0±92.4	141.4±68.9	0.965
Serum HbA1c (%)	6.4±1.4	6.2±1.0	6.6±1.6	0.578
NLR	2.54 (1.68-4.27)	2.85 (2.08-4.67)	3.22 (2.18-5.22)	0.012

Supplementary Table 2. Clinical characteristics of the stone formers stratified by proportion of uric acid in the stone composition.

Values are expressed as the number (percent), mean ± standard deviation, or median (interquartile range). BMI: body mass index; DM: type 2 diabetes mellitus; HTN: hypertension; CVD: cardiovascular diseases; CHOL: total cholesterol; TG: triglyceride; HbA1c: Glycated hemoglobin; NLR: neutrophil/lymphocyte ratio