

107. RENAL AFFECTION IN GOUT

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Introduction: Even from ancient times is known that uric acid is strongly Associated with renal disease. The disorders of uric acid metabolism lead to a nephropathy with variable clinical manifestations, defined as uric acid nephropathy. There are described the following kidney disorders in hyperuricemia: uric acid nephrolithiasis, acute hyperuricemia nephropathy, chronic urate nephropathy. Individuals with gout have a higher risk for uric acid stone formation due to the low urine pH, which creates an environment favourable for uric acid precipitation. Uric acid nephropathies are related to the increased produced amount or disposal in a low proportion of uric acid in the urine.

Materials and methods: Study population included 50 patients from Republican Clinical Hospital, Department of Rheumatology, with primary gout. The age of patients varied from 35 to 75 years. To appreciate the renal impairment in gout they were selected such examinations as ultrasonography, blood urea and creatinine, excretion of uric acid, blood levels of uric acid, renal urine concentrating ability and rate of glomerular filtration.

Discussion results: After the analyse of the results, it was made a classification of patients by the age of the disease. The patients with less than 10 years of gout presented: Uric acid nephropathy- 36.8%, Nephrolithiasis- 10.5%, Chronic kidney disease- 26.1%. Between the patients with a history of disease from 11 to 20 years it was observed next incidence: Uric acid nephropathy- 57%, Nephrolithiasis- 26,3%, Chronic kidney disease- 31.5%. The next group that included patients with gout from 21 to 30 years old presented the following data: Uric acid nephropathy- 71.4%, Nephrolithiasis- 85,7%, Chronic kidney disease- 42.8%. The last group of patients, with a history of more than 30 years of gout was divided like: Uric acid nephropathy- 82.1%, Nephrolithiasis- 60%, Chronic kidney disease- 40%.

Conclusion: The renal affection caused by the elevated levels of uric acid in gout is clearly defined in this study. Our results have shown that in a gouty population several aspects of kidney function may be significantly impaired. It was declared an evident correlation between disease's age and the evolution of kidney affection. This is consistent with a slowly progressive renal disorder, because the elimination of uric acid is reported to the renal good function and like this is creating a vicious circle. In conclusion, although the concept that uric acid might have a role in kidney disease once suffered a requiem, it has undergone a revival and seems deserving of additional, more developed study.

Key words: kidney, gout, hyperuricemia