ABSTRACT RELATION OF THE VALUE OF URINE PH TO THE TYPE OF STONE IN PATIENTS WITH UROLITIASIS IN POLY UROLOGY HOSPITAL DR. SOETOMO SURABAYA

Introduction: Urolitiasis is the presence of stones in the urinary tract. This disease is the third most disease in the urinary system. The faktors affecting the formation of stones are age, analog, muscular period, diet, body index, climatic faktors, fluid balance, and the pH of urine. Urolitiasis is caused by high stone-forming substances such as fender, oxalate, phosphate and uric acid, and low-inhibitory substances such as citrate and magnesium. Objective: The research is conducted to know the relationship between the pH value of urine with the type of stone in *urolitiasis* patients. Methods: This study is an observational analytic study with a cross-sectional method using secondary data in the form of medical records in the Department of SMF Urology RSUD Soetomo 2019 - 2020. Results: This study obtained 56 research samples, characteristics aged 6 - 76 years with an average age of 49, 92 ± 12.91 , on 43 men and 13 women. The largest pH range is at pH 4.5 - 8.0. The average pH value on the composition of carbonate rocks is 6.16, oxalate 6.33, calcium 7, phosphate 6.38, amonium 6.33, and uric acid 6.25. The pH value of urine was not related to the type of calcium, oxalate, phosphate, carbonate, amonium, and uric acid stones. Conclusion: The results of this study indicate there is no relationship between urine pH value and stone composition.

Keywords: *urolitiasis*, urine pH, calcium, oxalate, phosphate, carbonate, uric acid, amonium