

BIOCHEMICAL STUDY OF URINARY STONE IN OUTDOOR AND INDOOR WORKERS

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A biochemical study of 365 patients with urinary stones disease according to occupation and family history, and the occupation divided to two subgroups (outdoor workers (n=183) and indoor workers (n=182)) and evaluated laboratory test was done for each patients included phosphorus, calcium, uric acid, urea and creatinine in serum of patients and control group. In addition, 24 hr urine was collected and estimation the level of the biochemical estimation included phosphorus, calcium and uric acid as they are the main components of urinary stones. The results showed a higher significant difference serum phosphorus, uric acid, urea and creatinine in patients outdoor workers compared with the patients indoor workers and control group at (P=0.001), and the higher significant difference more obvious in patients with family history, as a higher significant difference serum calcium in patients with family history outdoor workers compared with the patients indoor workers and control group at (P≤0.05). Also the results showed a higher significant difference in 24 hr urine of phosphorus, calcium and uric acid in patients outdoor workers compared with the patients indoor workers and control group at (P=0.001) and its more higher in calcium and uric acid of patients with family history compared with the patients without family history at (P=0.001). Finally, this study proved the strong relationship between occupation and urinary stones formation, the epidemiology of stones increase according to the type of occupation. In addition, the study proved that patient's outdoor workers have incidence more than patient's indoor workers and increase with family history.

Biography

Zena A M Aljawadi has completed her PhD, in from Mosul University. She is the Head of Chemistry Department, College of Science, Mosul University. She has published more than 21 papers in reputed journals.

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