Assessment association between type of urinary tract stones with nutrition in patients referred to several therapeutic- surgery centers in Ardebil city(1387-88).

Abstract

Introduction: urinary stones are tertiary common urinary disease. Effective factors in formation of urinary stone are including crystalluria, diet, job, weather, Family history, drug and etc. The aim of this study was to determine the relationship between species urinary stones with nutrition among patients afflicted urinary tract stone in Ardabil city.

Methods: In a cross-sectional study which was performed on patients that referred to therapeutic centers in Ardabil city from March 2008 to July 2009 the relationship between species urinary stones with nutrition was evaluated. 150 patients were participated in this study. After stone analysis, two questionnaires of 24 hours food memorial in three day and frequency of diet were completed by patients and all data were entered to Food processor software then collected data analyzed with SPSS 11.5 And One-Way ANOVA, Chi-square, Pearson Correlation methods were used.

Results: 91 of patients (60.66%) were male and 59(39.4%) of them were female. 116 of patients (77.3%) had calcium oxalate stone, 15 of patients (10%) had phosphate calcium stone, 10 of patients (6.7%) had Acid uric and 9 of patients (6%) had phosphate ammonium stone. Mean age of patients was 41.90 ± 14.41 year.

The positive Significant correlation was found between Fat-Saturated and ammonium phosphate of urine (P=0.048 and R=0.162), Vit A-Total and acid uric of urine (P=0.021 and R=-0.189) .there was also positive Significant correlation between frequency use of white meat and Acid uric of urine(P=0.050 and R=0.160) and frequency use of meat and Acid uric of urine(P=0.048 and R=0.162), frequency use of butter and ammonium phosphate of urine (P=0.044 and R=0.165). the negative Significant correlation was found between frequency use of jams and calcium phosphate of urine (P=0.017 and R=-0.195) , frequency use of juice and ammonium phosphate of urine (P=0.009 and R=-0.214), Fat-Saturated and calcium phosphate of urine(P=0.013 and R=-0.202).

In this study there was not significant correlation between other alimentary ingredient with urinary stones.
**Conclusion:** The results of study showed positive Significant correlation between Acid uric stones with Vit A-Total, Vit A-carotene, frequency use of meat and white meat. Struvite stones with Fat-Saturated and frequency use of butter showed positive Significant correlation and there was negative Significant correlation between frequency use of juice. The other findings of this study was positive Significant correlation between calcium phosphate stone with jams and there was negative Significant correlation between calcium phosphate stone Fat-Saturated. no Significant correlation observed between other types of renal stones and other alimentary ingredient and diet. inference from this topic for prevention of renal stone formation and other disease we need functional and exact food program then with keep to that, had any disease.

**Key words:** Urinary Track Stone, Alimentary Ingredient, Diet