Study on the Relative Factors of Introducing Table Vinegar in Reducing Urinary Tract Infection in Patients with Long-Term Indwelling Catheter

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Abstract: This study was designed as an interventional research and intended to validate whether the introduction of drinking vinegar every day can reduce and even prevent urinary tract infection in Taiwan home stayed disabilities who using indwelling catheter. The data was collected from the subjects who have received home care case at northern Taiwan, according to the questionnaire and a medical records retroactive methodology, the subjects were informed and consent to drink 15ml of table vinegar in a daily diet, and through routine urine testing and culture study. Home care nurses would assist collecting urine at the point of before and after a meal from total 35 studied subjects per month, and total collected 4 times for testing. The results showed that when the average age of study subjects was 65.46 years and catheter indwelling time was 15 years, drinking table vinegar could inhibit the activity of E. coli O157: H7 and reduce its breeding. Before drinking table vinegar daily, the subjects' urine pH value was 7.0-8.0, and the average was 7.5, and the urine PH value dropped to 6.5 after drinking table vinegar for a month. There were two purple urine cases whose urine were changed from purple to normal color after two weeks of drinking, and the protein and bacteria values of urine gradually improved. Urine smell unpleasant before attending to this study, and the symptom improved significantly only after 1 week, and the urine smell returned to normal ammonia and became clean after 1 month later. None of these subjects received treatment in a hospital due to urinary tract infection, and there were no signs of bleeding in all cases during this study. The subjects of this study are chronic patients with a long-term bedridden catheterization; drinking cranberry juice is an economic burden for them, and also highly prohibited for diabetes patients. By adapting to use cheaper table vinegar to acidified urine and improve its smell and ease Purple Urine Syndrome, to furthermore, proven urinary tract infection, it can also to reduce the financial burden on families, the cost of social resources and the rate of re-admission.

Keywords: table vinegar, urinary tract infection, disability patients, long-term indwelling catheter

 $\textbf{Conference Title:} \ \textbf{ICAHNHAM 2018:} \ \textbf{International Conference on Adult Health Nursing, Health Assessment and Conference on Adult Health Nursing, Health Nursing, Market Nursing, Nursing$

Management

Conference Location: Tokyo, Japan Conference Dates: September 10-11, 2018