

VARIABILITY OF 24-HR VOIDING DIARY VARIABLES AMONG ASYMPTOMATIC WOMEN

Aims of Study

To determine whether urinary diary values are stable over time among women without lower urinary tract symptoms.

Methods

Women without lower urinary tract symptoms completed a 24-hour log of fluid intake and volumes voided during June/July 2001 and again during February/March 2002. Initial and repeat diaries were compared using Wilcoxin Signed Ranks tests, considered significant at the 5% level.

Results

138 subjects completed both diaries. Subjects were 49 (35%) African-American, 56 (41%) Caucasian, 20 (14%) Hispanic, 12 (9%) Asian and 1 mixed race. Subjects voided a median of 8 times / 24h during the first diary and 7 / 24h during the second, with 95% of subjects recording fewer than 13 voids per 24 hours during both diaries. Nighttime voids were recorded by 59 (43%) subjects during the first diary, and 54 (39%) during the second. Urinary frequency and total urine volume were both significantly greater during the first diary than during the second ($Z=2.1, p=0.3$ and $Z=3.3, p=0.001$, respectively). No significant differences in mean voided volume, maximum voided volume, voids per liter intake, total intake, daytime or nighttime diuresis rates were found when the groups were compared. However, there were large individual differences in all diary variables.

Conclusions

Data from 24hour urinary diaries concerning urinary frequency and urine volumes may vary significantly without any treatment. When urinary frequency is of interest, the number of *voids per liter intake* may represent the most stable measure.