

URINARY HABITS AMONG ASYMPTOMATIC WOMEN

Aims of Study

To determine normal ranges for voiding diary variables for a racially diverse sample of American women without lower urinary tract symptoms.

Methods

300 women without lower urinary tract symptoms completed a 24-hour log of fluid intake and volumes voided. We used linear regression to analyze diary data according to patient characteristics including race, age, body-mass index and parity.

Results

Subjects were 118 (39%) African-American, 117 (39%) Caucasian, 36 (12%) Hispanic, 28 (9%) Asian and 1 mixed race. Subjects voided a median of 8 times in 24 hours, with 95% of subjects recording fewer than 13 voids per 24 hours. Subjects recorded a median of 4 voids per liter intake (95% recording fewer than 9 voids per liter). Nighttime voids were recorded by 133 (44%) subjects. According to current definitions, polyuria was present in 54 (18%) subjects. Linear regression showed the number of voids per 24 hours was related to patient age ($B=0.1, p<0.001$) and fluid intake ($B=0.39, p<0.001$). Mean ($B=-0.31, p<0.001$) and maximum ($B=-0.2, p=0.003$) voided volumes were lower among African-American women. Voids per liter intake varied with age ($B=0.19, p=0.002$) and was higher among parous ($B=0.12, p=0.003$) and Asian ($B=0.17, p=0.002$) women. The number of nighttime voids depended only on patient age ($B=0.23, p<0.001$).

Conclusions

The results of this multiracial study differ materially from other studies of asymptomatic women. It is probably inappropriate to apply a single set of normative values to all women in North America because of the significant variability in regional climates and populations.