

URGE TO VOID INTERVAL IN YOUNGER VERSUS OLDER ASYMPTOMATIC MEN: NORMAL CHARACTERISTICS.

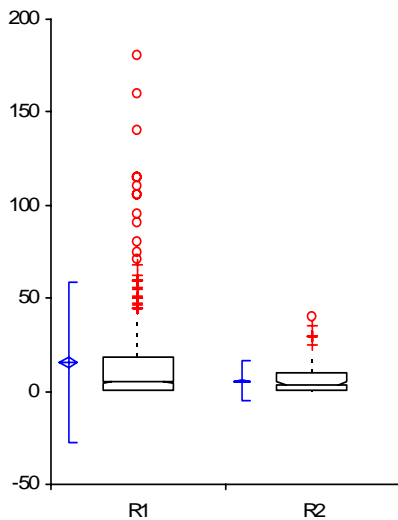
Introduction and aim: This study aimed to investigate the temporal relationship between the urge to void and actual time of voiding in a group of asymptomatic men. There is evidence of altered physiology in older people with lower urinary tract symptoms (LUTS) (1) which should mean that an older person has less time to reach the lavatory and void once the sensation of urge is experienced. This normal physiological change has not been demonstrated in normal individuals and, given the interest in “warning time” as a measure of drug effect in overactive bladder syndrome (2) and the debate upon the nature of urge and urgency, the normal variation would be useful to demonstrate.

Study design, materials and methods

Men from either an 18-30 or an >70 year group were screened for LUTS using a simple questionnaire. Men were taking no medication known to affect lower urinary tract function. Subjects were then asked to complete a 3-day bladder diary. The time at which they first felt a need to urinate and then the time at which they did urinate were recorded. Ethical committee approval was gained. Data were loaded into an Excel spreadsheet and compared where appropriate using non-parametric statistics for unpaired data.

Results

20 young (mean 22y) and 20 older (mean 79y) men were recruited. The diaries gave information on 322 (young) & 329 (older) men's voids. The distribution of urge – void interval time is shown in the graph.



The interval was (median and 95% CI) 5 / 4 - 5 and 3 / 3 - 5 minutes in older men. The intervals were statistically significantly different Mann Whitney U = 42517, $p < 0.0001$

Interpretation of results

The shorter urge – void time in older men is in keeping with expected physiological change. Older men have a reduced sensation of bladder filling and a reduced bladder capacity and thus should get less “warning time” of the need to void. This shorter time may also be explained by lifestyle and environmental factors, for example easier access to the lavatory in a home bound person. This explanation is less likely in our ambulant community dwelling group of men. The younger group was frequently able to delay voiding voluntarily – this may reflect personal need secondary to their activities not required in older men. The observed interval is small but this may be clinically meaningful in symptomatic older men with

associated co-morbidity. Surprisingly, the majority of micturitions occurred with minimal delay.

Concluding message

There appears to be a minimal delay in urge to void interval in the majority of individuals. Older people have a shorter time to respond to urge.

References

1. Age-associated changes in detrusor sensory function in women with lower urinary tract symptoms. *Int Urogynecol J* 1996; 7: 24-29.
2. Can medication prolong warning time? *Neurourology and Urodynamics* 2003;**22**: 468-9.