

Abstract Reproduction Form B-1

Author(s):

J. Corcos, J. Heaton, M. Rossignol, I. Shrier

Double Spacing

Institution
City
Country

Dept. of Urology and Epidemiology, McGill University,
Montreal and Queen's University, Kingston, Canada.

Double Spacing

Title (type in
CAPITAL
LETTERS)

NORMAL VARIATIONS AND INFLUENCE OF STRESS, COFFEE
INTAKE AND SEXUAL ACTIVITY IN FLOWMETRY PARAMETERS
OF A MID-AGE ASYMPTOMATIC COHORT OF VOLUNTEER
UROLOGISTS.

Aims of Study: To assess normal variations of flowmetry parameters in a volunteer population of mid-age asymptomatic Urologists. To analyze the influence of stress, coffee intake and sexual activity on these parameters.

METHODS: 31 male Urologists from Ontario and Quebec volunteered for this study. All were healthy, not taking medications known to interfere with lower urinary tract function and symptom-free as defined by an IPSS <5 (average 1.8 S.D. 1.7). Each Urologist received flowmeters over a period of two weeks, at home and in his busiest office. 10 flowmetries with a volume >150ml were requested of each of them, 5 at home and 5 in the office. Their subjective level of stress, coffee intake and sexual activity in the hour before each flowmetry was recorded through a short self-administered questionnaire and stress visual scale.

RESULTS: Results are in average per individual. The voided volume was 331.9 ml with a standard deviation (S.D.) of 94.8 ml. The voiding time was 32.7 sec (S.D.=15.5). The peak flow rate 20.5 ml/sec (S.D.=3.9), the mean flow rate 14.3 ml/sec (S.D.=3.0) and the time to maximum flow 7.2 sec (S.D.=4.0). Subjective levels of stress don't significantly change these parameters. Coffee intake was reported by 15 urologists. Their flowmetries were separated in two groups (with and without coffee). The voided volume was 290.8 ml (S.D.=77.3) vs 337.4 ml (S.D. 109.2) (p=0.03), peak flow rate 18.9 ml/sec (S.D.=3.1) vs 19.4 ml/sec (S.D.=4.1) (p=0.49). 5 urologists reported having had sexual activity in the hour before their flowmetry for a total of 9 flowmetries only. For this small group parameters did not vary significantly 370.2 ml (with sex) vs 330.2 ml (p=0.636) and peak flow rate 15.4 ml/sec (with sex) vs. 20.5 ml/sec (p=0.269)

CONCLUSION: Flowmetry parameters and voided volume are highly variable in a normal non-symptomatic population. Subjective stress level and sexual activity don't appear to have an influence on these parameters. Coffee intake significantly changes the voided volume, not the peak flow rate. These conclusions should be considered when using flowmetry parameters as an outcome measure.