A STUDY OF UROFLOW PATTERNS IN HEALTHY WOMEN OF MENSTRUAL AGE-GROUP: DEVELOPMENT OF A FLOW-VOLUME NOMOGRAM.

Hypothesis / aims of study
Voiding dysfunction is not uncommon among women. No universally accepted nomogram is available for female population. We studied the uroflow parameters of healthy Indian women in menstrual age-group.

Study design, materials and methods
This was a cross-sectional observational study. Healthy women of menstrual age group not having voiding dysfunction were enrolled during 2007. Participants included hospital staff and students, patients' attendants and patients admitted for non-urological indications.

Results
A total of 326 women underwent uroflowmetry in sitting position. Data of 305 women was selected for final analysis. Parameters are presented as mean ± SD. Mean age was 33 ± 8.63yrs, voided volume 302.96 ± 166.46ml, maximum flow-rate 23.54 ± 9.37ml/sec, average flow-rate 13.55 ± 6.08ml/sec, micturition time 24.77 ± 13.83sec and mean time to Qmax 8.65 ± 6.49sec. Total 242 had a Qmax of more than 15ml/sec.

Interpretation of results
Qmax had positive association with voided volume and negative with age of participant. Flow-volume nomograms are presented in means & standard-deviations for Qmax and Qave.

Concluding message
These results will guide physicians for initial evaluation of women presenting with voiding dysfunction.

Specify source of funding or grant none
Is this a clinical trial? No
What were the subjects in the study? HUMAN
Was this study approved by an ethics committee? Yes
Specify Name of Ethics Committee institute ethics committee, postgraduate institute of medical education and research, chandigarh, india
Was the Declaration of Helsinki followed? Yes
Was informed consent obtained from the patients? Yes