

A STUDY OF EFFECT OF VOIDING POSITION ON VOIDING PARAMETERS IN HEALTHY ADULT MEN.

Hypothesis / aims of study

Voiding position is thought to affect the voiding function (1); however, the data is scarce and controversial (1,2). We conducted this study to evaluate the effect of voiding positions on voiding parameters in healthy adult men.

Study design, materials and methods

This was a cross sectional observational study. A total of 55 men without lower urinary tract symptoms were included in the study. Each participant was asked to void into a digital weight-transduction uroflowmeter in each of the three voiding positions, standing, sitting and squatting, 2 times in each position. Each act of voiding was performed once the bladder was comfortably full to normal desire. Postvoid residue was measured after each void using ultrasonography. Maximal flow rate (Q_{max}), average flow rate Q_{ave}), voided volume (V), voiding time (T_{v100}) and time to Q_{max} (T_{Qmax}) were recorded and compared.

Results

mean age of the participants was 26.58±7.04yrs and body mass index 21.66±3.09kg/m². Q_{max} correlated positively with voided volume and negatively with age. Q_{max} and Q_{ave} were significantly lower and T_{v100} & T_{Qmax} higher in sitting position compared to the other two positions. These were not different between standing and squatting positions. There was no significant difference in voided volume and postvoid residue in any of the positions.

Interpretation of results

Flow rates are significantly lower and voiding time significantly prolonged in sitting position compared to standing / squatting positions. Standing and squatting positions are similar regards to voiding characteristics.

Concluding message

These observations emphasize the role of correct positioning and careful interpretation of urodynamic voiding results in various positions.

References

1. Neurourology and Urodynamics 1999; 18: 553–557
2. Urology Journal 2005; 2: 216-222.

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