

## UTILITY OF BLADDER DIARIES CONTAINING FREQUENCY VOLUME CHARTS FOR WOMEN

### Hypothesis / aims of study

For research purposes, most authorities agree that it is necessary to measure the time and amount of each void for at least a 24h period using a frequency volume chart (FVC). However in clinical practice, the FVC is often omitted. Certain diagnoses - polyuria (P), oliguria (O), nocturnal polyuria (NP), and small/large bladder capacity (SBC, LBC) - can only be diagnosed by a FVC. The purpose of this study is to estimate the prevalence of these conditions based on the FVC.

### Study design, materials and methods

This is a retrospective multicenter observational study of consecutive women evaluated for lower urinary tract symptoms (LUTS) who completed a 24h bladder diary. When multiple diaries were completed, the earliest was used. There were no other exclusions. The following data was recorded for each patient: maximum voided volume (MVV), 24 hour voided volume (24HV), and nocturnal polyuria index (NPI). Corresponding diagnoses were derived as follows: O (24HV < 1L); normal (24HV=1-3 L); P (24HV > 3 L); NP (NPI > .33); SBC (MVV <150 mL); LBC (MVV > 600 mL).

### Results

There were 643 patients, 407 male and 236 female. Prevalence of FVC-derived conditions in women is seen in table 1.

### **Table**

**Prevalence** of conditions derived from the FVC

1.

	<b>Prevalence (n=643)</b>	<b>in females (n=236)</b>
<b>Polyuria</b>	9%	7%
<b>Oliguria</b>	21%	27%
<b>Small capacity bladder</b>	7%	7%
<b>Large capacity bladder</b>	5%	4%
<b>Nocturnal polyuria</b>	20%	18%

### Interpretation of results

P, O, NP, LBC and SBC are not uncommon in patients with LUTS; over a third of women had either O or P and 18% had NP. Although this data may not be directly transferable to the general population, the concept is sound, i.e. that without measurement of voided volumes during a FVC it is difficult or impossible to diagnose these conditions.

### Concluding message

Frequency voiding charts provide necessary information for the proper diagnosis and treatment of patients with LUTS.

### Disclosures

**Funding:** Institute for Bladder and Prostate Research **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Western IRB approved **Helsinki:** Yes **Informed Consent:** No