

## A COMPARISON OF PELVIC ORGAN PROLAPSE QUANTIFICATION (POP-Q) FINDINGS AND PATIENT POSITION

### Hypothesis / aims of study

The goal of this study is to examine the difference in pelvic exams in the standing versus supine position. We anticipate that pelvic exams performed in the standing position will result in the demonstration of maximal pelvic organ prolapse. Secondary outcomes will be to determine if there are certain factors which may predict the differences in standing versus supine exams.

### Study design, materials and methods

After obtaining IRB approval, a retrospective chart review was performed on all new patients who presented to a single fellowship-trained urogynecologist between August 2005 and August 2010. All patients were examined in both supine and standing positions. To detect a 2 cm difference in a measurement (3 cm versus 5 cm, with a standard deviation of 1.2 cm), a sample size calculation revealed that 125 patients would be required, assuming 80% power and an alpha of 5%.

Descriptive statistics were used to analyze demographic information. Both the two-tailed paired t-tests and Wilcoxon signed ranks tests were used to evaluate the differences between standing and supine exams. Multivariable logistic regression was performed to determine if clinical factors could predict upstaging.

### Results

There were 502 charts reviewed. The mean (standard deviation) age was 56.9 (12.8) and BMI was 28.1 (6.3). The majority of the population was Caucasian, making up 93.6% of the patients studied. In this population, 74.7% had cystocele, 60.6% had rectocele, and 59.8% had apical prolapse stage II or greater. In 4.6% of patients with apical prolapse the stage changed by two stages upon standing exam and 39.4% changed by one stage. In patients with cystocele, the exam was upstaged by one stage in 11.2% upon standing. We considered a 2 cm change in exam to be clinically significant and this occurred in 48.0% of apical measurements.

Patients with a presenting complaint of pressure had an increased risk (OR 2.07) of being upstaged during standing exam. Other clinical factors were not found to predict upstaging.

### Interpretation of results

We demonstrated a difference between standing and supine exams in patients presenting for evaluation of pelvic organ prolapse. The majority of changes were seen in the apical compartment, with approximately 50% of patients demonstrating a clinically significant change. We feel that this could result in a difference of treatment approaches for these patients.

### Concluding message

In patients being evaluated for pelvic organ prolapse we encourage physicians to perform both supine and standing examinations.

### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Ohio Health Institutional Review Board **Helsinki:** Yes **Informed Consent:** No