Overall Pelvic Floor Symptoms Improve Similarly After Pessary and Behavioral Treatment for Stress Incontinence

Objective: To determine if differences exist in symptom specific bother and quality of life measures (QOL) in women using pessary and behavioral therapy for treatment of stress urinary incontinence (SUI).

## Methods:

This is a planned secondary analysis of a multicenter, randomized trial (Ambulatory Treatments for Leakage Associated with Stress Incontinence [ATLAS]) that assigned 446 women with symptoms of SUI to continence pessary, behavioral therapy (pelvic floor muscle training and continence strategies) or combination therapy. This analysis compares change in the following validated symptom and QOL measures between the pessary and behavioral groups at 3-months post randomization: urinary (UDI), prolapse (POPDI) and colorectal (CRADI) subscales of the Pelvic Floor Distress Inventory; urinary (UIQ), prolapse (POPIQ) and colorectal (CRAIQ) subscales of the Pelvic Floor Impact Questionnaire; and stress and urge subscale of the Questionnaire for Urinary Incontinence Diagnosis (QUID).

## Results:

Study participants had a mean $\pm$ SD age of 49.8 $\pm$ 11.9 and 79% were vaginally parous. 84% were Caucasian and 10% African American. 149 were randomized to pessary and 146 to behavioral therapy. Baseline PFDI and PFIQ data did not differ between groups and is presented in the Table 1. Baseline QUID stress and urge scores for the pessary and behavioral groups also did not differ significantly (8.1 $\pm$ 4.5 and 4.2 $\pm$ 4.2 and 8.5 $\pm$ 3.2 and 4.3 $\pm$ 3.3, p=.35 and .80 respectively).

Both the pessary and behavioral groups had significant within group improvement on each of the symptom and QOL measures at 3-months; however, score improvement did not differ significantly between groups. Table 2 shows mean score improvement on each of the measures in both groups. Similarly, QUID stress and urge scores improved within each group, although QUID stress ( $4.2\pm6.2$  and  $4.0\pm3.6$  p=.20) and urge score ( $1.95\pm5.4$  and  $2.3\pm2.8$  p=.36) improvements did not differ significantly between the pessary and behavioral groups, respectively.

## Conclusion:

Pelvic floor symptom bother and QOL improve 3-months after both pessary and behavioral therapy in women undergoing conservative treatment for SUI. Other factors should be considered in helping women choose one type of therapy over the other for non-surgical treatment of SUI.

Table 1 Baseline

	UDI	POPDI	CRADI	UIQ	POPIQ	CRAIQ
Pessary Mean±SD N=149	83.5±40.6	54.46±47.6	66.0±57.5	70.6±60.1	19.1±44.3	23.4±48.5
Behavioral Mean±SD N=146	77.8±35.7	45.8±48.7	56.5±60.3	67.1±53.4	10.9±27.7	18.5±38.4
P value	.21	.31	.17	.61	.06	.30

Table 2 12 weeks post randomization

	UDI	POPDI	CRADI	UIQ	POPIQ	CRAIQ
Pessary	33.9±38.	13.5±30.1	16.4±39.2	31.4±50.0	19.1±44.3	12.9±37.8
Mean±SD	5					
N=149						
Behavioral	30.7±33.	14.7±34.1	15.4±41.0	32.1±38.4	10.9±27.7	10.7±28.7
Mean±SD	4					
N=146						
P value	.88	.24	.83	.61	.23	.66