

## INCIDENCE OF BLADDER OUTLET OBSTRUCTION (BOO) IN FEMALE URETHRAL SYNDROME (FUS)

### Aims of Study

The symptoms of FUS, like frequency, urgency, dysuria may be originated from mechanical or functional obstruction of bladder neck or urethra. BOO was found in about 2/3 of male LUTS by urodynamic study (UDS). In large retrospective reviews of women referred for evaluation of LUTS, 2.7 to 23% had urodynamic evidence of BOO. However, only a few studies were done for the prevalence of BOO in FUS by UDS. This study aimed to identify the causative factors of the FUS symptoms including BOO as evidenced by UDS.

### Methods

A total of 116 women with FUS were enrolled in our evaluation of UDS. An additional 247 patients presenting for evaluation of stress urinary incontinence (SUI) served as controls. Maximum flow rate, voided volume, post-void residual, detrusor pressure at maximum flow rate, maximum detrusor pressure were compared between FUS and SUI cases. By definition, FUS cases were divided as normal, BOO, detrusor underactivity, detrusor instability and low compliance urodynamically.

### Results

Women with FUS showed lower mean maximum flow rate (15.9 versus 23.8ml per second,  $p < 0.05$ ), higher mean post-void residual (86 versus 22ml,  $p < 0.05$ ), higher detrusor pressure at maximum flow rate (24.0 versus 18.0 cm water,  $p < 0.05$ ) and higher maximum detrusor pressure (33.3 versus 27.9 cm water,  $p < 0.05$ ) than those with SUI. The incidence of BOO, detrusor underactivity, detrusor instability were noted in 31.9%, 25%, 16% respectively in FUS group.

Parameter s	FUS(n=116)					Total	
	Normal (n=25)	BOO (n=37)	Underactivity (n=29)	Instability (n=18)	Low comp. (n=7)	FUS (n=116)	SUI (n=247)
Qmax	24.8	9.1*	14.8*	17.8	16.0	15.9*	23.8*
PdetQmax	21.8	38.5*	11.7*	15.4	22.1	24.0*	18.0*
Pdetmax	31.2	49.1*	17.8*	24.1	37.0	33.3*	27.9*

\* :  $p < 0.05$

### Conclusions

These results indicated the importance of UDS in identifying the causative factors of the FUS symptoms. Treatment of the BOO in FUS enables one to provide new options of the treatment modality in addition to the traditional ways of the FUS treatment.