

**Supplementary Table 4: Definitions of urodynamic diagnoses used in different studies**

Article reference	PBNO	DV	DU	DO
Crisp <i>et al.</i> , 1976 <sup>[6]</sup>	NA	NA	NA	NA
Abrams <i>et al.</i> , 1981 <sup>[7]</sup>	An obstructed bladder was shown by maximum flow rates of <15 mL/s with a maximum detrusor pressure in excess of 70 cm H <sub>2</sub> O	NA	The diagnosis of an underactive detrusor was made when flow rates were below normal secondary to a maximum flow detrusor pressure of <30 cm H <sub>2</sub> O	An unstable bladder was defined as a bladder which, during filling, showed contractions of at least 15 cm. of water above resting bladder pressure, which occurred while the patient was trying to inhibit micturition
Kaplan <i>et al.</i> , 1996 <sup>[8]</sup>	BOO was defined as a sustained detrusor contraction of >45 cm H <sub>2</sub> O and a catheterized uroflow of <12 mL/s	Pseudodyssynergia (voluntary closure of the membranous urethra during voiding) was made based on a number of criteria, including electrical activity of the external sphincter during voiding in the absence of abdominal straining, and brief and intermittent closing of the membranous urethra during voiding. This was detected by both EMG and Pseudodyssynergia was diagnosed based on several criteria, including electrical activity of the external sphincter during voiding in the absence of abdominal straining and brief, intermittent closing of the membranous urethra during voiding detected on EMG and fluoroscopy	Impaired detrusor contractility (IC) was defined by low detrusor contractions (<30 cm H <sub>2</sub> O) and a catheterized uroflow of <12 mL/s	DI was defined as a nonvolitional, phasic increase in detrusor pressure of at least 15 cm H <sub>2</sub> O or a rise in detrusor pressure associated with increased sensation of urgency
Kaplan <i>et al.</i> , 1997 <sup>[9]</sup>	BOO was defined as a sustained detrusor contraction of >45 cm and a catheterized uroflow of <12 mL/s	Pseudodyssynergia was diagnosed based on several criteria, including electrical activity of the external sphincter during voiding in the absence of abdominal straining and brief, intermittent closing of the membranous urethra during voiding detected on EMG and fluoroscopy	Impaired detrusor contractility was defined as low detrusor contractions (<30 cm water) and a catheterized urine flow rate of <12 mL/s	Detrusor instability was defined as a nonvolitional, phasic increase in detrusor pressure of at least 15 cm. water or an increase in detrusor pressure associated with increased sensation of urgency
Nitti <i>et al.</i> , 2002 <sup>[3]</sup>	NA	NA	Impaired contractility was diagnosed when BOO index was <20 and uroflow was <12 mL/s. Fluoroscopic images of the bladder outlet during voiding were taken with specific attention to opening (or nonopening) or focal narrowing of the bladder neck	Detrusor instability was considered present if there was an acute increase in detrusor pressure (involuntary contraction) associated with an urge regardless of pressure, or an increase in detrusor pressure of 15 cm. H <sub>2</sub> O or greater without an urge
Wang <i>et al.</i> , 2003 <sup>[10]</sup>	Primary bladder neck obstruction is defined as narrowing only at the vesical neck on fluoroscopic voiding cystourethrogram, sustained detrusor contraction during voiding, low peak flow rate, obstructive flow pattern and relaxed external sphincter EMG. The diagnostic criteria of benign prostatic obstruction are similar to those of primary bladder neck obstruction except the narrowing was noted at the prostatic urethra	Dysfunctional voiding is defined as obstruction at the external sphincter determined by intermittent increase in sphincter EMG and/or intermittent narrowing of membranous urethra on fluoroscopy	Impaired detrusor contractility is defined as detrusor pressure <30 cm H <sub>2</sub> O, Q <sub>max</sub> <15 mL/s and no obstruction identified radiologically	Idiopathic detrusor overactivity is defined as an increase in detrusor pressure (involuntary contraction) associated with an urge regardless of pressure, or an increase in detrusor pressure of 15 cm H <sub>2</sub> O or greater without an urge
Toh <i>et al.</i> , 2006 <sup>[11]</sup>	NA	NA	NA	NA
Karami <i>et al.</i> , 2011 <sup>[12]</sup>	The diagnosis of bladder neck dysfunction was made indirectly by the urodynamic findings of outlet obstruction in a typical clinical situation in the absence of urethral stricture, prostatic enlargement, and striated sphincter dyssynergia	Dysfunctional voiding was defined as an intermittent and/or fluctuating flowrate due to involuntary intermittent contractions of the peri-urethral striated muscle during voiding, in neurologically normal individuals	Detrusor underactivity was defined as a contraction of reduced strength and/or duration, resulting in prolonged bladder emptying and/or a failure to achieve complete bladder emptying within anormal time span	Detrusor over activity is a urodynamic observation characterized by involuntary contractions during the filling phase which may be spontaneous or provoked

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Article reference	PBNO	DV	DU	DO
Jamzadeh <i>et al.</i> , 2014 <sup>[13]</sup>	BOO was defined as a sustained detrusor contraction of >45 cm H <sub>2</sub> O and a catheterized uroflow of <12 mL/s	Dysfunctional voiding (voluntary closure of the membranous urethra during voiding) was made based on a number of criteria, including electrical activity of the external sphincter during voiding in the absence of abdominal straining, and brief and intermittent closing of the membranous urethra during voiding. In addition, to make the diagnosis of dysfunctional voiding, a uroflow measurement performed in a private setting showing intermittent increases and decreases in flow in an undulating fashion was required	Detrusor underactivity was defined by low detrusor contractions (<30 cm H <sub>2</sub> O) and a catheterized uroflow of <12 mL/s	DO was defined as a nonvolitional, phasic increase in detrusor pressure of at least 15 cm H <sub>2</sub> O or a rise in detrusor pressure associated with increased sensation of urgency
Jeong <i>et al.</i> , 2014 <sup>[14]</sup>	BOO, defined as an AG number of 40 or greater or 20-39.9 with a slope of the linear passive urethral resistance ratio of >2 cm H <sub>2</sub> O/mL/s, where the AG number was calculated as the PdetQmax-2 Qmax, was present concomitant with EMG evidence of external sphincter relaxation, and neither urethral stricture nor prostatic enlargement was observed	DV was diagnosed on the basis of the EMG activity of the external sphincter/pelvic floor during voiding in the absence of abdominal straining. If DV was diagnosed during a PFS, a free uroflow measurement was performed in a private setting to identify undulating intermittent increases and decreases in flow	DU was diagnosed when the AG number was <20 and the Qmax was <12 mL/s during a PFS and no obstruction was recognized in urethroscopy or TRUS	Patients were regarded as positive for idiopathic DO if a spontaneous or provoked involuntary detrusor contraction was observed during the filling cystometry

NA=Not available, PBNO=Primary bladder neck obstruction, DV=Dysfunctional voiding, DU=Detrusor underactivity, DO=Detrusor overactivity, BOO=Bladder outlet obstruction, EMG=Electromyography, AG=Abrams-Griffith, DI=Detrusor instability, PdetQmax=Detrusor pressure at maximum flow, PFS=Pressure flow study, TRUS=Transrectal Ultrasound, IC=Involuntary contraction, AG=Abrams-Griffith number