

ARE DETRUSOR OVERACTIVITY AND “INCREASED BLADDER SENSATION” BOTH PART OF THE SAME SPECTRUM OF BLADDER DYSFUNCTION?

Hypothesis / aims of study

Historically, the diagnosis of “sensory urgency” was discontinued as a term by the ICS in 2003. This followed 25 years of continuous clinical and academic usage. It had been suggested that “sensory urgency” was an early form of detrusor overactivity (DO). The equivalent current term would appear to be “increased bladder sensation” (IBS). The study aims to compare the clinical and urodynamic associations of IBS and DO.

Study design, materials and methods

592 women attending for an initial urogynaecological / urodynamic assessment took part in this prospective study. In addition to a full clinical assessment, all women underwent free uroflowmetry, RUV measurement (by vaginal ultrasound [1]) and multichannel filling and voiding cystometry. Data was separated into those having (i) neither IBS or DO; (ii) IBS (iii) DO. Apart from prevalence figures, comparative associations were sought for (iii) age; (iv) parity; (v) presenting symptoms; (vi) presence of at least 1 documented urinary tract infection (UTI) in the previous 12 months; (vii) 2 or more (recurrent) documented UTI in the previous 12 months; (viii) prior hysterectomy; (ix) prior continence surgery (x) menopause (xi) menopause and HRT use; (xii) sign of clinical stress leakage; (xiii) retroverted uterus; (xiv) anterior vaginal prolapse; (xv) uterine prolapse; (xvi) posterior vaginal prolapse; (xvii) apical vaginal prolapse; (xviii, xix) maximum, average urine flow rate (MUFR, AUFR) centiles, Liverpool Nomograms [2]; (xx) median residual urine volume (RUV) mls; (xxi,xxii) voiding difficulty: VD1,VD2 (MUFR, AUFR under 10th centile Liverpool Nomogram and/or RUV >30mls); (xxiii) diagnosis of urodynamic stress incontinence (USI); (xxiv) diagnosis of uterine and/or vaginal prolapse (grade >0).

Results:

Table 1 shows that the clinical and urodynamic profiles for women with IBS and DO are very similar. The only significant difference is the presence of the symptom of urge incontinence (p=0.023) and (by definition) involuntary detrusor contractions during filling cystometry, in women with DO.

Interpretation of results

The clinical and urodynamic profiles of IBS and DO are very similar. Women with either IBS or DO are less likely to have symptoms, signs or diagnoses of stress incontinence (USI) or prolapse than women with neither IBS or DO.

Concluding message

IBS and DO appear to be part of the same spectrum of bladder dysfunction. The difference in median age may point to IBS being an earlier form of DO.

1: Brit J Urol , 1989,64:347-349

2: Brit J Urol, 1989, 64:21-30

	No or DO)	(IBS IBS	DO	p-value IBS vs. DO
Number of patients	441	77	74	
Age (Median)	59 (16-98)	54 (22-90)	56 (23-91)	0.368
Parity (median)	2 (0-9)	2 (0-7)	1.5 (0-6)	0.126
Presenting symptoms				
Stress incontinence	266 (60%)	44 (57%)	33 (45%)	0.124
Urge incontinence	192 (44%)	39 (51%)	51 (69%)	0.023*
Voiding difficulty	44 (10%)	8 (10%)	11 (15%)	0.407
Frequency	124 (28%)	38 (49%)	34 (46%)	0.675
Nocturia	74 (17%)	27 (35%)	25 (34%)	0.868
Urgency	114 (26%)	24 (31%)	29 (39%)	0.302
Prolapse	149 (34%)	19 (25%)	13 (18%)	0.285

UTI				
1 or more	138 (31%)	34 (44%)	24 (32%)	0.139
2 or more	95 (22%)	19 (25%)	12 (16%)	0.198
Prior hysterectomy	162 (37%)	17 (22%)	18 (24%)	0.744
Prior continence surgery	80 (18%)	7 (9%)	7 (9%)	0.938
Menopause	317 (72%)	46(60%)	47 (64%)	0.634
Menopause and HRT	220 (50%)	35 (45%)	36 (49%)	0.694
Clinical stress leakage (sign)	335 (76%)	38 (49%)	50 (54%)	0.563
Retroverted uterus (uterus present)	97 (37%)	14 (25%)	14 (25%)	0.913
Prolapse				
Anterior vaginal (Grade>0)	270 (61%)	31 (40%)	28 (38%)	0.760
Uterine (Grade>0)	306 (69%)	38 (49%)	31 (42%)	0.358
Posterior vaginal (Grade>0)	261 (59%)	26 (34%)	20 (27%)	0.368
Apical vaginal (Grade>0)	121 (27%)	8 (10%)	6 (8%)	0.629
MUFR (Median)	15.65	12.3	12.35	0.762
AUFR (Median)	7.05	5.9	6.75	0.873
RUV (median – mls)	29.56	11.12	9.22	0.505
VD1	181 (41%)	26 (34%)	23 (31%)	0.726
VD2	189 (43%)	23 (30%)	20 (27%)	0.700
USI	343 (78%)	42 (55%)	43 (58%)	0.660
Prolapse (Grade>0)	234 (65%)	33 (47%)	24 (36%)	0.179

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DISCLOSURES: NONE

HUMAN SUBJECTS: This study did not need ethical approval because Ethnics committee approval was not required. but followed the Declaration of Helsinki Informed consent was obtained from the patients.