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DOES DETRUSOR OVERACTIVITY MAKE A DIFFERENCE IN WOMEN WITH OAB SYMPTOMS?

Hypothesis / aims of study

According to the ICS definition, Overactive Bladder symptoms (OAB) are suggestive of Detrusor Overactivity (DO) but the definition does not specify the actual correlation between OAB and DO. The aim of this analysis is an attempt to identify the clinical and urodynamic differences between OAB women with or without DO.

Study design, materials and methods

Adult women with idiopathic OAB referred to 55 Urodynamic Units to undergo Urodynamic investigation (UDS) who comply with selection criteria were enrolled in an epidemiological, prospective, multicentre study conducted in Spain. Sociodemographic and clinical data were collected. Patients were asked to complete Patient Perception of Intensity of Urgency Scale (PPIUS) regarding the last 4 weeks, the Bladder control Self-Assessment Questionnaire (BSAQ), the Overactive Bladder Questionnaire Short Form (OABqSF) and a 3-Day Bladder Diary (3dBD). A centralised lecture of UDS data was realized. The bladder diary and urodynamic variables were compared between OAB female population with or without DO. The Mann-Whitney U test was used to analyse the continuous variables and the X² test to analyse the categorical variables.

Results

Of the 212 women studied, 103 had urodynamically proven DO (48,6%). Age (mean) of OAB women with DO and without DO is 57.5 and 57.0 years old respectively.

Table I. Clinical comparison between OAB women with or without DO (3dBD categorical variables)

	DO+		DO-		p
	n	%	n	%	
Urgency (if PPIUS≥3)	77	46,95	87	53,05	0,679
UUI+ (≥1 episode)	71	48,97	74	51,03	0,496
Frequency+ (>7 a day)	81	47,93	88	52,07	0,421
Nocturia+ (>1 episode per night)	77	47,24	86	52,76	0,851
There is no clinical differences between OAB women with or without DO					

Table II. Clinical differences between OAB women with or without DO (3dBD continuous variables)

	DO+		DO-		p
	n	mean	n	mean	
Urge Urinary Incontinence (UUI)	90	3,91	100	2,29	<0,00001
UUI≥1	71	4,96	74	3,09	<0,00001
24- hour Frequency	92	10,97	106	10,00	0,03
Voided Volume Average	92	161,34	105	180,72	0,03
Nocturia	92	1,99	105	1,64	0,04
Pads	91	3,24	100	2,37	0,01
OAB women with DO were associated with a higher 24-hour frequency, lower voided volume average, a higher number of UUI episodes and a higher number of pads used					

There were no significant differences in daytime frequency, maximum voided volume (daytime and night time), number and degree of urgency episodes, intake 24-hour, 24-hour production and nocturnal urine volume.

Table III. Urodynamic Comparison between DO patients and no DO patients

	DO+		DO-		p
	n	Mean	n	Mean	

UDS Comparison (continuous variables)					
Voided Volume (ml) [Uroflowmetry]	75	167,56	77	217,94	0,01
MCC-Maximum Cystometric Capacity (ml)	99	243,32	109	304,50	<0,00001
FS-First sensation of bladder filling (ml)	90	92,57	103	121,93	<0,00001
Urgency (ml)	43	193,72	23	240,78	0,14
Strong desire to void (ml)	66	157,53	82	219,44	<0,00001
UDS Comparison (categorical variables)					
Bladder compliance reduced (%)	38	80,85	9	19,15	<0,00001
First sensation of bladder filling increased (%)	78	50,32	76	49,03	0,33
Urgency + (%)	82	73,87	28	25,23	<0,00001
UUI (%)	69	89,61	7	9,09	<0,00001
Stress Urinary Incontinence (SUI) (%)	17	45,95	19	51,35	0,91
Mixed Urinary Incontinence (MUI) (%)	15	88,24	2	11,76	0,001
Normal flow (%) [Pressure Flow Study]	43	43,43	55	55,56	0,20
Bladder volume at FS and MCC were lower in OAB women with DO					

Interpretation of results

Although there are some differences between OAB women with or without DO like higher 24-hour frequency, lower voided volume average, greater number of UUI episodes or higher number of pads used, we do not consider these differences clinically relevant in our daily clinical practice. Urodynamic differences do not correlate (bladder volume at FS and MCC) with clinical symptoms in these women.

Concluding message

In our study population, we do not find differences of clinical relevance between OAB women with or without DO.

Disclosures

Funding: Research grant Astellas Pharma Spain **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Ethics Committee of Hospital Ramón y Cajal, Madrid, Spain **Helsinki:** Yes **Informed Consent:** Yes