

## INCONTINENCE AND SEXUAL INTERCOURSE

### Hypothesis / aims of study

Urinary incontinence during sexual intercourse refers to overactive bladder(OAB) syndrome and can have intensity, frequency and severity varies but is always a highly disabling symptom for the quality of life of the individual and the couple (1-2). This is seen clearly from the symptoms and patients often fail to distinguish whether the urinary incontinence during the penetration or at the time of orgasm. The etiopathogenesis of these symptoms has not yet been sufficiently studied, nor is there a standardization of drug or physiatric therapy.

The aim of our study is therefore an attempt to clarify the incidence of urinary incontinence during sexual intercourse in a geographically defined population, free of urological diseases and concomitant define a therapeutic model

### Study design, materials and methods

From February 2006 to May 2010, we have studied 560 women, in a territorial defined group, who reported lower urinary tract Symptoms (LUTS). The methodology for inclusion in the study included the self-administered validated questionnaires specific bladder overactivity (OAB) screener and International consultation on incontinence questionnaire (ICI-Q) and the compilation of a weekly urinary diary, also perform a urine test, a urine culture and an ultrasound of the urinary tract with evaluation of residual urine.

Were excluded from the study patients with gynecological or urinary tract infections, stones, bladder cancer or neurological bladders and all patients with pelvic organ prolapse stage II or more of the Pelvic Organ prolapse - Quantification (POP-Q)

Based on the history and clinical evidence have been divided into three subgroups.

- a) patients with presumed genuine effort incontinence.
- b) patients with presumed mixed incontinence.
- c) patients with presumed urge incontinence

From the subgroup "c", in which 224 patients were entered, were selected for inclusion in the study 42 patients with age range 24-56 to, sexually active, consistent territoriality who reported urinary incontinence only during sexual intercourse.

Of these, 18 reported loss of urine to orgasm (Group I) and 22 to penetration (Group II). The patients included in the study were evaluated physiatric pelviperineale and urodynamics according to the principles of the 2nd International Consultation on Incontinence

### Results

Gynecologic evaluation performed by POP-Q, 8 of 18 patients who reported loss of urine to orgasm (they had a grade I cystocele associated) and 11 out of 22 in the group with incontinence to penetration. Of particular interest was the finding that patients in Group II assessment physiatric pelvic perineal you highlight a text pubo coccygeal muscle (PC Test) with a score equivalent to or less than three. While patients in group I belonged to the PcTest was equal to or less than three in only two cases. During urodynamics has never found a baseline detrusor overactivity in no patient in either group. In group I during the stress tests performed after the onset of the first desire to micturition, was seen in 8 patients that led to an OAB in all patients leak urine with the exception of two patients (Dry OAB). In group II, 6 patients there was the emergence of OAB with leakage of urine. After repeated stress test (Valsava, suprapubic percussion) in the supine position, was shown in 3 patients in group I and in 7 patients in group II a sudden relaxation of the perineal floor drain urine. Pressure flow examination, the patients with perineal showed sustained release of urination unfold primarily for perineal relaxation. In 4 patients in group I and 9 in group II was not detected no abnormalities or during cystometry or being examined pressure flow.

### Interpretation of results

Urinary incontinence during sexual activity, studied in a territorially defined group of women, in both groups is attributable to two causes, detrusor overactivity evoked under stress and prolonged perineal relaxation. In Group I, however, has a greater presence of detrusor overactivity (50%), while the sustained release represented less perineal (18.75%). In group II, conversely, the percentage of women with urinary incontinence by perineal deficit to be more represented (35%) compared to detrusor overactivity (30%).

### Concluding message

In our experience it appears that the etiology of urinary incontinence, which occurs only during sexual activity, is mainly due to different mechanisms if it exists during penetration or at the time of orgasm. In fact, one can assume that in group II, penetration incontinence, determinism is related to a tearing apart and a perineal inverse stretch reflex, whereas in group I, incontinence orgasm will evoke an OAB perhaps from micturition facilitation mechanisms to departure from the frontal region of brain.

### References

1. serati m, salvatore s.,et all.: Urinary incontinence at orgasm reallion to detrusor overactivity Eur.Urol.54,2008 911-917
2. Hilton P. :urinary incontinence during sexual intercourses:a common but rarely volunteered symptom BJOG 1988; 95 377-381

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<b>Is this a clinical trial?</b>	<b>Yes</b>
<b>Is this study registered in a public clinical trials registry?</b>	<b>No</b>

<i>Is this a Randomised Controlled Trial (RCT)?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	University of catania
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes