49

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WOMEN WITH MIXED VERSUS STRESS URINARY INCONTINENCE SYMPTOMS: WHO HAS THE MOST IMPACT ON SEXUAL QOL

Hypothesis / aims of study

To evaluate and compare the impact in sexual quality of life of pre and post-menopausal women with symptoms of mixed and stress urinary incontinence.

Study design, materials and methods

The research, an observational, transversal study, was conducted at the Department of Gynecology of two referral hospitals in the period from July 2011 to December 2013. All women underwent a gynecological physical examination and signed an informed consent form, which had been previously approved by the local Research Ethics Committee. Sexual function was evaluated through the Portuguese version of Pelvic Organ Prolapse/Incontinence Sexual Questionnaire (PISQ-12). Generic and specific QoL questionnaires were applied: versions previously validated for use in Portuguese of King's Health Questionnaire (KHQ) and Medical Outcomes Study 36-item short-form (SF-36). Firstly women were divided in two groups, if they were in pre or post-menopausal state. Secondly, each group was subdivided according to the type of their urinary symptoms: SUI or MUI. Sociodemographic data and QoL scores were compared between women with SUI and MUI inside each group (pre and post-menopausal). The Mann-Whitney test was used for comparison of continuous or ordinal variables between groups. The level of significance was set at < 0.05 for all statistical tests. The *Statistical Package Social Science* (SPSS), version 20.0, was used for all calculations.

Results

A total of 105 pre-menopausal women and 105 post-menopausal women were evaluated. Among pre-menopausal women, 47 (44.8%) had symptoms of SUI, and 58 (55.2%) had symptoms of MUI. Among post-menopausal women, 30 (28.6%) had symptoms of SUI, and 75 (71.4%) had symptoms of MUI. Inside each group (pre and post-menopausal), the following variables were similar between SUI and MUI women: age, income, body mass index (BMI), parity, weigh of newborn, pelvic organ prolapse stage, physiotherapy assessment (standard Functional Evaluation of Pelvic Floor Muscles) and urodynamic evaluation of SUI (detecting Valsalva Leak Point Pressure) (Table 1). Educational level was different between SUI and MUI women only in the pre-menopausal group (p=0.027). In pre-menopausal women, the mean score of PISQ-12 was lower in the group with MUI, indicating that sexual function was worse among these women (Table 2). The generic QoL instrument (SF-36) revealed significant difference only in the Bodily Pain domain, indicating worse general QoL in women with MUI. The specific instrument (KHQ) was more sensitive to detect differences in QoL between the groups. The mean score in domains Physical Limitation and Emotional Problems also indicated worse specific QoL in women with MUI. In post-menopausal women, PISQ-12 and KHQ scores were similar between the groups with SUI and MUI. However, SF-36 detected poorer QoL for women with MUI in three domains: Role Physical,Vitality and Mental Health.

Interpretation of results

Using PISQ-12 questionnaire, we found that pre-menopausal women with symptoms of MUI have poorer sexual health than those with symptoms of only SUI. These findings can be supported by the scores of specific QoL questionnaires, which reveal that MUI is related to physical limitation and emotional problems. On the other hand, specific questionnaires couldn't detect differences in QoL between post-menopausal women with SUI or MUI, maybe because of ineffectiveness of these questionnaires. In this age group, generic QoL instrument is better useful and seems more sensitive do detect the main aspects affected by their urinary condition.

Concluding message

Studies detect differences in QoL according to the type of UI, so that women with mixed urinary incontinence (MUI) have poorer QoL than those with stress urinary incontinence (SUI)[2]. We can see this difference especially in the domain of emotional health. Some studies have shown that younger women are more bothered with this condition than the older ones[3]. This is probably related to their active social and professional life. With specific questionnaires, it's proved that sexual function is negatively affected in women with bladder dysfunction. Pre-menopausal women with symptoms of MUI have greater interference in their sexual quality of life than postmenopausal women. The impact on sexual function of women with MUI should be an important factor to change their overall QoL The reasons for this difference in sexual function of these two groups, for symptoms of MUI, requires more studies and more in-depth reviews of sexuality of these women.

Table 1 – Sociodemographic characteristics of pre and post-menopausal women according to the type of urinary incontinence.

	Pre-menopausal			**Post-menopausal**		
	SUI n=47 / 44.8% Average±SD	**MUI n=58 / 55.2% Average±SD**	**p***	**SUI n=30 / 28.6% Average±SD**	**MUI n=75 / 71.4% Average±SD**	**p***
Age	43±05	43±06	0.685	59±10	63±9	0.035
Educational level	09±04	07±05	**0.027**	6±5	6±4	0.870
Income	1156.7±504.2	1195.7±995.9	0.197	1052.0±798.0	1178.0±995.9	0.351

Pregnancies	04±02	05±03	0.147	5±3	6±4	0.404
Deliveries	03± 01	04±02	0.060	4±3	5±4	0.482
Weigh of newborn	3801±672	3921±740	0.516	3784±812	3820±776	0.915
BMI	28.76±5.05	30.24±5.08	0.084	29.16±5.26	28.41±5.24	0.394
Functional Evaluation of Pelvic Floor Muscles	02±01	02±01	0.712	2±1	2±1	0.782
VLPP	81.36±35.25	87.82±28.06	0.144	79.59±41.94	67.26±29.99	0.394

* Mann-Whitney U

Table 2 – Descriptive analysis and comparison of QoL questionnaires scores between groups.

	Pre-menopausal			**Post-menopausal**		
Instruments	**SUI n=47 / 44.8% Average±SD**	**MUI n=58 / 55.2% Average±SD**	**p***	**SUI n=30 / 28.6% Average±SD**	**MUI n=75 / 71.4% Average±SD**	**p***
PISQ-12	31±09	24±08	**0.001**	26±8	25±9	0.914
SF-36						
General Health	54.21±26.28	49.00±23.64	0.340	54.92±22.30	47.25±25.34	0.150
Role Physical	60.34±27.42	49.19±25.24	0.061	55.40±23.40	43.90±23.93	**0.034**
Physical Function	54.31±41.76	39.53±44.06	0.140	37.00±40.90	35.59±38.62	0.947
Role Emotional	45.97±45.79	31.85±45.35	0.132	34.66±41.36	46.31±44.20	0.321
Social Functioning	63.36±30.42	62.50±33.01	0.995	60.48±30.75	64.19±26.71	0.529
Vitality	42.76±25.20	45.35±21.36	0.608	56.26±25.22	43.22±23.94	**0.033**
Bodily Pain	60.86±23.84	46.24±24.68	**0.006**	56.96±25.15	44.34±25.98	0.054
Mental Health	56.28±25.61	53.12±24.40	0.581	64.96±23.19	50.38±25.86	**0.013**
KHQ						
General Health	52.00±29.00	49.00±28.00	0.758	56.00±19.00	65.00±25.00	0.080
Incontinence Impact	67.71±31.03	79.81±26.39	0.092	70.82±38.10	79.88±28.44	0.353
Role Limitation	48.20±30.82	60.42±32.54	0.084	48.05±33.77	57.38±32.49	0.233
Physical Limitation	42.51±39.23	61.24±33.81	**0.045**	51.97±33.79	63.68±31.30	0.142
Social Limitation	22.88±26.36	32.65±27.87	0.082	25.41±31.65	32.62±31.26	0.213
Personal Limitation	36.77±40.67	54.18±39.15	**0.052**	40.18±42.10	34.59±40.17	0.778
Emotional Problems	41.72±32.74	58.05±35.45	**0.044**	46.56±37.97	57.81±31.18	0.140
Sleep/Energy Disturbance	42.45±36.17	54.89±29.11	0.108	45.49±36.69	53.21±32.54	0.329
Severity Measures	51.69±26.17	57.54±22.38	0.338	48.51±25.71	51.57±26.24	0.714

* Mann-Whitney U

References

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