

ARE THERE DIFFERENCES IN URINARY INCONTINENCE TYPE, SYMPTOMS, AND QUALITY OF LIFE BETWEEN GRAND MULTIPARA AND NON-GRAND MULTIPARA MENOPAUSAL WOMEN?

Hypothesis / aims of study

Grand Multipara (GMP) women, ≥ 5 deliveries, have a higher rate of all types of UI as compared with Non Grand Multipara (NGMP) women (<5 births). Incidence of UI also increases in women in concert with peri-menopause and menopause [1]. Over 97.5% of women will be in menopause by 57 years of age [2]. It is believed that the decline in estrogen levels occurring in menopause may cause urogenital impairment. Nevertheless, recent publications have not found that duration of menopause and lack of estrogen affects UI prevalence and/or worsening of its symptoms and the role of estrogens as hormonal therapy for UI are currently controversial[3]. Data are limited regarding the prevalence of UI type (Stress Urinary Incontinence-SUI, Urge Urinary Incontinence-UUI) symptoms, and quality of life (QoL) of menopausal GMP women as compared with menopausal non-Grand Multipara (NGMP) women. The aim of the current study was to explore the differences in UI type, symptoms, and QoL related to UI in GMP menopausal women as compared with NGMP menopausal women.

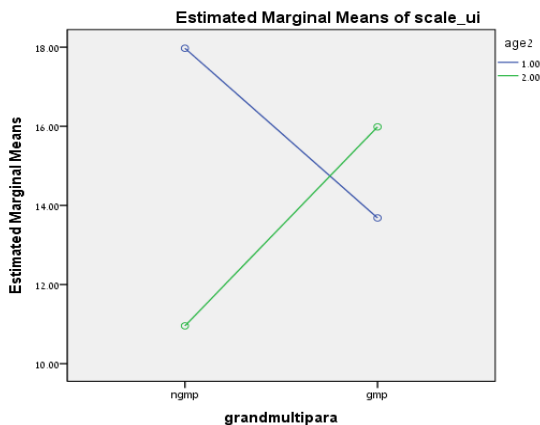
Study design, materials and methods

A correlational-comparative study of women with UI was conducted in a tertiary medical centers. Women who visited one of the three uro-gynecologic clinics for their care were invited to participate in the study if they met all of the following inclusion criteria: Hebrew literate, ≥ 50 years old, and had self defined menopausal status by. The only exclusion criterion was having UI that was not considered bothersome by the woman. Women were assigned to the GMP group if they had 5 or more deliveries, with at least one delivery over 24 weeks, while the NGMP group consisted of women with 1 to 4 deliveries, with at least one delivery over 24 weeks. All questionnaires were validated and completed in a single visit. They included: Questionnaire for Urinary Incontinence Diagnosis (QUID) assessing UI type, Urogenital Distress Inventory (UDI-6) assessing UI symptoms, and Incontinence Quality of Life (I-QOL) for quality of life relating to UI.

Results

One hundred and forty seven two women enrolled in the study, while 15 were eventually excluded for not meeting the inclusion criteria. The study included 132 women, 65 women { average age of 67.23 ± 11.08) in the NGMP group and 67 women with (average age 65.04 ± 5.24) in the GMP group ($p=0.22$). There was significant difference in number of previous deliveries (parity), religiosity, income, and family status. Women in the NGMP group had a mean of 2.78 deliveries [± 0.92] as compared to 7.06 [± 2.38] in the GMP group ($p<0.001$). There were no significant differences in chronic disease incidence, or hormone therapy use. Using ANOVA with controlling for those variable with significant difference between the groups, no significant differences between the groups regarding UI type, UI symptoms, and QoL were found. As menopausal status was self defined, we decided to divide our data in two age groups, 50-59, and 60 years old and over. Significant higher score of the UI type scale were found in the NGMP younger group, compare to the UI type score in the GMP younger group ($F=2.71$; $p=0.04$). This trend was reversed in the GMP older group, with higher score of UI type compare to the NGMP group in the older group ($F=3.89$; $p=0.003$).

The interaction between UI type and parity in the 2 age groups (1=50-59; 2= ≥ 60 years old



The UDI-6 did not show any significant differences between the parity/age groups. There was no significant association between the QoL and the parity in the younger group. The GMP in the older group had lower QoL as compared to the older NGMP group ($F=4.66$; $p=0.001$).

Interpretation of results

GMP menopausal women demonstrated higher prevalence of UI types, SUI and UUI, in the the younger group of NGMP women in while there was an opposite trend in aged NGMP aged 60 and over. The GMP in the older group had lower QoL as compared to older women in the NGMP group. These reversed results may be due to the possibility of heterogeneity of the young group. There is a chance that some of the women may be pre and peri and ost menopausal instead of actually menopausal..

Concluding message

The decreased quality of life of the menopausal GMP group, over 60 years of age, supports the necessity to identify these women at risk for UI, offering them counseling regarding the risk of UI development, and providing early intervention and treatment.

References

1. Hannestad Y, Rortveit G, Sandvik H & Hunskaar S (2000) A community-based epidemiological survey of female urinary incontinence: the Norwegian EPINCONT study. Epidemiology of Incontinence in the County of Nord-Trondelag. Journal of Clinical Epidemiology 53, 1150-1157 DOI:10.1016/S0895-4356(00)00232.
2. de Bruin, J. P., Bovenhuis, H., van Noord, P. A., Pearson, P. L., van Arendonk, J. A., te Velde, E. R., et al. (2001). The role of genetic factors in age at natural menopause. Hum Reprod, 16(9), 2014-2018
3. Robinson, D., & Cardozo, L. (2011). Estrogens and the lower urinary tract. Neurourol Urodyn, 30(5), 754-757.

Disclosures

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