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## **RISK FACTORS FOR URINARY INCONTINENCE IN MEN AND WOMEN**

<u>Aim of Study:</u> Aim of this study was to identify risk factors, associated with urinary incontinence in men and women. We analysed the results obtained from 2500 patients, participating in a health survey in the area of the City of Vienna.

<u>Methods:</u> Health surveys are periodically organised by the City of Vienna and participation is free of charge. A number of parameters are routinely obtained: 1) a detailed medical history including the German version of the Bristol LUTS questionnaire, 2) physical examination including weight and height, blood pressure, ECG and spirometry, 3) evaluation of socio-demographic parameters like nutrition habits, alcohol and cigarette consumption, education, 4) a urine and blood samples for further evaluation.

In this survey over a period of 12 months we attempted to correlate the 37 questions of the Bristol LUTS questionnaire asking for micturition problems and urinary incontinence with potential risk factors obtained in the health survey.

<u>Results:</u> The results obtained from 2498 participants (1262 women, mean age 49.7  $\pm$ 13.6 years; 1236 men, mean age 48.6  $\pm$  13.0 years) were analysed. Out of the 1262 women 332 (26.3%) experienced urinary incontinence within the last four weeks. Significant correlation was identified between urinary incontinence and age (r=0.22), body-mass index (r=0.20), urgency (r=0 16), feeling of incomplete bladder voiding (r=0.21) and previous gynaecological surgery (r=0.23). As for blood parameters, only serum glucose level demonstrated a significant correlation with urinary incontinence.

Out of the 1236 men only 62 (5.0%) experienced involuntarily urine loss within the last four weeks. In this population the strongest correlation was to be found for age (r=0.12), urgency (r=0.16), nocturia (r=0.16), incomplete bladder voiding (r=0.16) and poor urinary stream (r=0.18). In both sexes no correlation was identified between urinary incontinence and nutrition habits nor for alcohol and cigarette consumption. Remarkably, education had no impact on the prevalence of urinary incontinence.

<u>Conclusions</u>: In our study we were able to identify a number of factors associated with urinary incontinence. Since urinary incontinence has a high prevalence in a western community these findings may help to significantly reduce costs for the public health system by direct prevention of such risk factors.