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Blewniewski M[1], Marks P[1], Jeromin L [1]
1. Clinic of Urology

# ANALYSIS OF COINCIDENT RISK FACTORS FOR URINARY STRESS INCONTINENCE IN WOMEN OPERATED ON IN 1984 – 2004.

Hypothesis / aims of study
Urinary incontinence (UI) can be regarded as a social disease, because its incidence rate in the general population exceeds 5%. The incidence of stress urinary incontinence (SUI) in women is dependent on age, type of work, coincident diseases, as well as obstetric and gynecological history. Elderly age plays an important role in the pathophysiology of SUI, because it is associated with hormonal deficiency, changes in connective tissue structure and long-term physical exertion. The acknowledged risk factors for SUI include: postmenopausal period, numerous deliveries, burdensome physical exertion, increased body mass index (BMI), past gynecological operations and other procedures in the pelvis minor, as well as radiotherapy. The aim of the study is retrospective analysis of prevalence of the aforementioned risk factors among women operated on for SUI in our Department.

Study design, materials and methods
In 1984-2004, 198 women were operated on because of stress urinary incontinence /Zoedler procedure – 116pts, IVS procedure – 82pts/. The patients' age ranged from 35 to 83 years, with the mean of 64 years. On the basis of anamnesis and clinical assessment, the prevalence of the following risk factors was determined: duration of the disease, body index, number of past deliveries , past gynecological operations for benign and malignant tumors with subsequent radiotherapy, incidence of diabetes and character of work.

Results
The incidence of SUI in the operated women increased with age, the patients' mean age was 64 years. They were women at postmenopausal age. Women between 50 and 65 years of age constituted the most numerous age group. The duration of the disorder was varied. In 40.4% of patients it ranged from 2 to 5 years, whereas in 20.2% of cases the patients had been suffering from SUI for 16 to 25 years. Among the surgically treated patients, 106 (53.4%) were obese, 66 (33.3%) overweight, and 26 (13.3%) had normal body weight. Obese and overweight women constituted the vast majority of the group (>86%). The number of past deliveries in surgically treated patients ranged from 0 to 6 (mean 2.5). Most of the women operated on (139, i.e..>70%) were patients who had given birth to 1-2 children. However, the severity of SUI increased with the number of past deliveries. In the group subjected to IVS procedures, 15 women had had previous surgical procedures involving the pelvis minor, performed because of reproductive organ or intestinal disorders. Five patients had been previously treated with irradiation for malignant tumors and demonstrated mixed type urinary incontinence. 15% had been treated for diabetes. 70% had done jobs associated with physical work. Postmenopausal age and physical work were the most frequent risk factors. Numerous deliveries (3 and more) were found to be an additional risk factor, especially in women from rural areas. In each of the surgically treated patients, at least two risk factors were observed.

Interpretation of results
Postmenopausal age and physical work were the most frequent risk factors. Numerous deliveries (3 and more) were found to be an additional risk factor, especially in women from rural areas. In each of the surgically treated patients, at least two risk factors were observed.

Concluding message
SUI occurs primarily in women at postmenopausal age. Urinary incontinence risk factors exert a negative effect on the quality of life. Earlier education, providing women with information concerning risk factors and possibility of developing this disorder, should result in higher proportion of women treated conservatively at the early stage of the disease. Previous assessment of several coincident risk factors and early enough institution of conservative

treatment of SUI may result in reduction of the incidence of advanced SUI stages, as well as of the costs of surgical treatment of more advanced disease.