

HYPERTENSION HAS SIGNIFICANT IMPACT ON APPEARANCE OF URINARY INCONTINENCE IN WOMEN

Hypothesis / aims of study

Hypothesis was that hypertension influence development of urinary incontinence.

The objective of the study was to assess whether is the arterial hypertension independent risk factor for development of urinary incontinence. Research was conducted as a longitudinal prospective study in the period 2013-2015.

Study design, materials and methods

Of the total of 619 women, there were 466 (75.3%) of women with urinary incontinence and 153 (24.7%) women of average age (49.84 ±13,197 yrs) without of symptoms which formed the control group. The criterion for inclusion in the study were: age over 18 years, was not pregnant, is able to read, write and understand the language and presence of prolapse, urinary or fecal incontinence (or any combination). Criteria for exclusion from the study were women with vesicovaginal fistula, vulvodynia, painful bladder syndrome and chronic pelvic pain syndrome (defined as pelvic pain for more than 6 months)

All patients were investigated by: detailed medical history, 3 day Frequency-Volume Chart physical examination, neurological assessment, stress test in the supine and standing position, Oxford gradient scale, the evaluation of the contraction of the muscles pelvic strength. Biochemical blood tests, urinalysis and urine culture. All patients have completed the questionnaire ICIQ, IIQ7, PISQ, I- QoL and SF 36th

Based on the obtained data all patients with incontinence are divided into 3 groups: with stress urinary incontinence: 147 (31.5%) women of average age 56,20±11,57yrs, urge incontinence: 86 (18.5%) women of average age 59,39±13,35 years and mixed incontinence: 233 (50.0%) women of average age 60,79±10,39yrs

Results

Significantly more women without hypertension do not have incontinence (,000). Significantly more women with hypertension have incontinence (,000) (Pearson Chi-Square = 25.335 df = 1 Sig. = , 000). Analysis of incontinence categories: as categories of the same variable, in relation to the category – without incontinence - these same variables shows that hypertension has a significant impact on all three categories of incontinence: present to higher mixed incontinence probability B = - 1.140 SE = 222 Wald = 26.358 df = 1 Sig. = , 000 (95% CI) and higher urge incontinence probability B = SE = -1.047, 280 Wald = 13.937 df = 1 Sig. = , 000 (95% CI) and impact of hypertension absent to higher without incontinence probability 1.047 SE = 280 Wald = 13.937 df = 1.

No significant correlation between the duration of the hypertension and length of the incontinence in years ($p > 0.05$). There is a significant difference in the duration of incontinence in the years between the different types of incontinence ANOVA = 4.040 Sig. = , 018

Interpretation of results

Women who do not have hypertension less often suffer from incontinence. There is significant impact of hypertension to mixed incontinence and urge incontinence.

Concluding message

The duration of hypertension in for years has no influence on the development of any type of incontinence. Women who suffer from urge incontinence earlier appear on examination.

Disclosures

Funding: there was no funding and research is conducted voluntary **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** Ethical committee Clinical Center of Serbia **Helsinki:** Yes **Informed Consent:** Yes