

## EFFECTS OF PELVIC ORGANS PROLAPSE SURGERY ON OAB SYMPTOMS.

### Hypothesis / aims of study

The working hypothesis was that urethral obstruction caused by pelvic organs prolapse can induce OAB symptoms. Therefore the restoration of pelvic anatomy with accompanying proper uroflow should restore normal micturition pattern.

### Study design, materials and methods

Forty eight women aged 51-77 years (mean 62,4 ± 7.32) with stage III or IV prolapse (POP-Q scale) were included to the study. Patients with LUTS (inflammation, infection, pain) were excluded. Each patient underwent clinical examination, full urodynamic examination (cystometry and uroflowmetry, MMS Libra +). Patients were also asked to fill King's Health questionnaire. Three months after mesh surgery (posterior, anterior or both) all patients were evaluated in the same way. Statistical analysis was performed using Kolmogorov-Smirnov and U Mann-Whitney tests were used.

### Results

Overactive bladder symptoms were diagnosed in 27 patients. Detrusor overactivity was found in ten patients. In 17 patients, out of 27 with OAB before surgery, overactivity symptoms completely resolved after surgery (63%). On the other hand *de novo* OAB symptoms appeared after surgery in 2 patients (4,1%). Half of the patients with OAB symptoms after surgery had detrusor overactivity before mesh repair while only 30% of patients without OAB symptoms after surgery had DO before surgical procedure. Peak flow during uroflowmetry increased in patients without OAB symptoms after surgery (18,82ml/s vs 22,6ml/s) and slightly decreased in patients with OAB symptoms after surgery (21,4 ml/s vs 19,5ml/s) however these results were not statistically significant. In group of patients without OAB before and after surgery peak flow increased (20,05ml/s vs 22,8ml/s) but this also was not statistically significant. Quality of life measured by King's questionnaire analysis improved in group of patients with disappearance of OAB symptoms in such domains as: General Health Perceptions (41,18%vs22,06%, p>0,05), Incontinence Impact (53%vs23,5%, p<0,05), Social Limitations (54%vs 24,5%, p<0,05) and Sleep (40,2% vs 17,6%, p<0,05).

### Interpretation of results

Correction of pelvic organ prolapse stage III and IV in patients with OAB symptoms leads to improvement in bladder conditions in half of patients. Such treatment also resulted in disappearance of symptoms of detrusor overactivity ascertained in urodynamic studies. Overactive bladder syndrome with DO was more resistant for surgical treatment compared to OAB without DO. Quality of life improved in patients who did not present OAB bladder symptoms after mesh surgery.

### Concluding message

In patients with OAB symptoms coexisting with advanced pelvic organ prolapse restoration of the anatomy might cure or improve bladder symptoms.

### Disclosures

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