

## SUMMARY

**Background:** Mid-urethral tape implantation is at present a common procedure for stress urinary incontinence. It is greatly successful with a low degree of complications. A large part of patients suffering from stress urinary incontinence has co-existing symptoms of overactive bladder (OAB), which can improve in a certain manner after placing of the mid-urethral tape. Data in literature about risk factors for persistence of OAB symptoms are not unanimous.

**Objectives:** To determine the influence of mid-urethral tape implantation on the different symptoms of OAB, to determine risk factors for persistence of OAB symptoms after mid-urethral tape implantation.

**Methods:** The study included 111 female patients suffering at the same time from stress urinary incontinence and symptoms of OAB. All of them underwent implantation of mid-urethral transobturator tape. Using micturition diary and two specific questionnaires (ICIQ-OAB and ICIQ-OABqol) we compared the intensity of OAB symptoms before and after tape implantation. To determine risk factors for persistence of OAB symptoms we used univariate logistic regression, followed by multivariate regression analysis for selected factors.

**Results:** All the four symptoms of OAB – urgency, frequency, nocturia and urgency incontinence – improved statistically significantly. Micturition frequency per 24 hours decreased about 31%, per night about 50%, urgency incontinence disappeared in 81%. Persistence of urgency incontinence was lower than persistence of frequency and nocturia. Quality of life limited by OAB symptoms improved significantly. Risk factors for persistence of OAB symptoms were found by multivariate regression analysis to be asthma, age > 65 years, parity > 2 and decreased total cystometrical capacity (< 300 ml).

**Conclusion:** Symptoms of OAB improved statistically significantly after implantation of mid-urethral tape, together with quality of life. The mid-urethral tape obviously stabilizes the urethra, favourably influencing the symptoms of OAB. Nevertheless, there are patients with certain risk factors where the mid-urethral tape cannot improve OAB symptoms.