

## CESA AND VASA SURGICAL TECHNIQUES ARE EFFECTIVE IN THE TREATMENT OF FEMALE NOCTURIA

### Hypothesis / aims of study

CESA and VASA surgical techniques were developed for the surgical treatment of female urgency urinary incontinence (UUI). Several patients reported a rapid improvement of nocturia thereafter. The aim of this study was the retrospective analysis of the respective data.

### Study design, materials and methods

We conducted a retrospective analysis of micturition protocols and standardized incontinence questionnaires. Incontinence symptoms were assessed with incontinence questionnaire containing items of the Birmingham Bowel and Urinary Symptoms Questionnaire (BBUSQ-22), the International Consultation on Incontinence Modular Questionnaire (ICIQ-SF), the Patient Global Impression of Improvement (PGI-I) questionnaire and King’s Health Questionnaire (KHQ). Micturition protocols and questionnaires were obtained previous and 4 months after surgery.

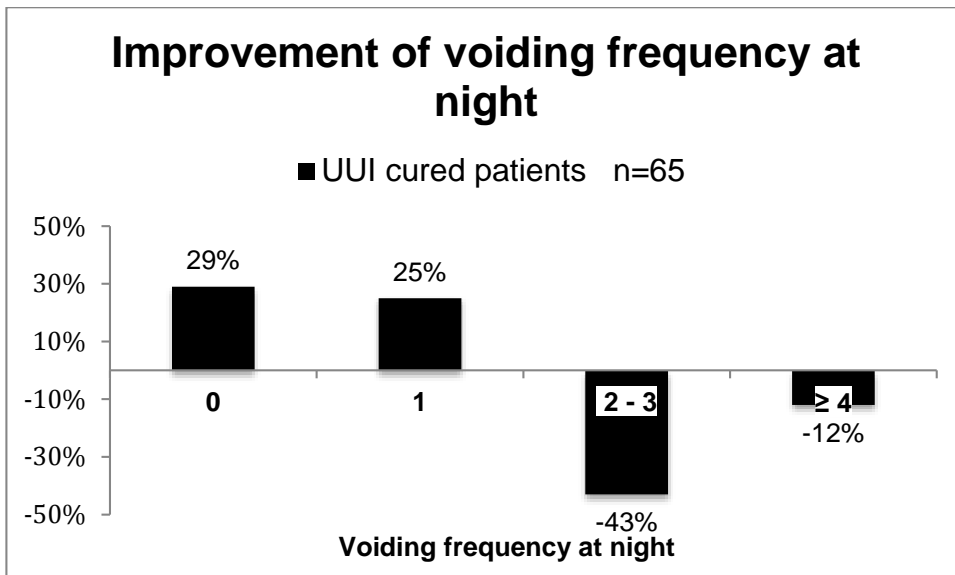
CESA and VASA surgical procedures were developed for the treatment of female urgency urinary incontinence (UUI) by reconstruction of the uterosacral ligaments. Alloplastic PVDF tapes (polyvinylidene fluoride) were used to replace the uterosacral ligaments in an anatomic and physiological correct manner. These tapes were fixed between the cervix (DynaMesh CESA®, FEG, Textiltechnik mbH Aachen, Germany) or the vaginal vault (DynaMesh VASA®, FEG, Textiltechnik mbH Aachen, Germany) and the S2 level of the sacrum.

Standard statistical analysis programs (SPSS Version 20.0) were applied when required. Approval was obtained from the University of Cologne Ethical Committee.

### Results

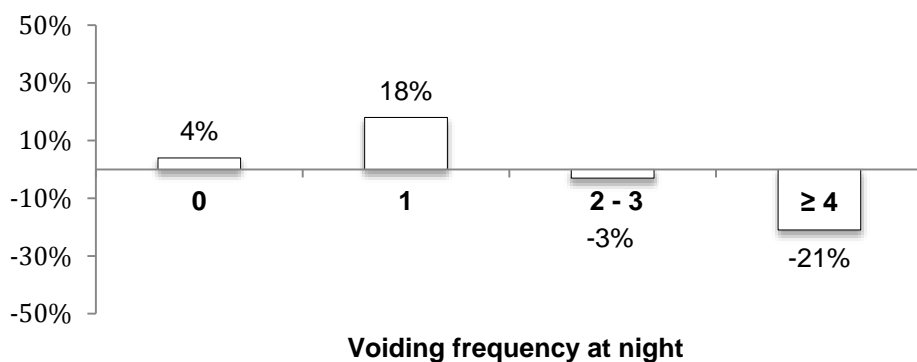
250 patients underwent surgical treatment of UUI by means of CESA or VASA. 189 patients (100%) were suffering from nocturia. 22 (12%) of the patients woke once a night to void and 167 (88%) of patients woke two or more times a night to void. Postoperative micturition protocols were evaluated in 201 patients: 65 patients which were cured of UUI and 136 patients which were not cured of UUI. After CESA and VASA 27 of the cured patients (42%) had no nocturia compared to 13 patients (10%) who were not cured ( $p < 0.001$ ).

If we except one void per night as normal then 53 (82%) of the cured patients improved as compared to 49 patients (36%) who were not cured ( $p < 0.001$ ).



## Improvement of voiding frequency at night

□ UUI non-cured patients n=136



### Interpretation of results

The implementation of the CESA and VASA surgical techniques reduced the voiding frequency at night in 65% of UUI patients.

### Concluding message

In female patients who successfully underwent surgical treatment for UUI by means of CESA or VASA nocturia disappeared in 2 out of 3 cases.

### Disclosures

**Funding:** Travel expenses by the FEG, Textiltechnik mbH, Aachen, Germany **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** University of Cologne Ethical Committee **Helsinki:** Yes **Informed Consent:** No