

Wille S¹, Heidenreich A², Koch V³, Hofmann R³, Engelmann U⁴

1. Department of Urology, Division Urogynecology and Neurourology, University of Cologne, 2. Department of Urology, Division Urooncology, University of Cologne, 3. Department of Urology and Pediatric Urology, Philipps-University, Marburg, 4. Department of Urology, University of Cologne

PREOPERATIVE ERECTILE FUNCTION IS ONE PREDICTOR FOR POST PROSTATECTOMY INCONTINENCE

Hypothesis / aims of study

The precise etiology of post prostatectomy incontinence (PPI) is not fully understood and risk factors are not yet comprehensively defined. It has been reported that nerve sparing prostatectomy improves postoperative erectile function, whereas the influence on urinary control is unclear. However, the innervation of the sphincter will have an effect on continence. The integrity of the innervation of the urinary sphincter may also be characterized by the preoperative erectile function of each patient. We therefore searched our database for a possible correlation between the preoperative erectile function and the incidence of PPI.

Study design, materials and methods

403 patients who underwent radical retropubic prostatectomy between January 2000 and May 2003 were enrolled into this retrospective study. Data of 327 patients (response rate 81%) at a median followup of 20 months were analysed using the validated International Index of Erectile Function (IIEF 5) and a standardized urinary symptom inventory. Continence was defined as usage of no or one pad daily. Erectile Dysfunction (ED) was defined as none/mild or moderate/severe with an IIEF 5 score of 17 or more or less than 17, respectively.

Results

Univariate and multivariate logistic regression analysis including preoperative IIEF 5 scores, BMI, age and nerve sparing prostatectomy, identified preoperative erectile function as significant predictor for PPI ($p=0.01$; odds ratio=1.039; confidence interval 1.009-1.069), whereas age ($p=0.458$), BMI ($p=0.633$) and nerve sparing prostatectomy ($p=0.992$) did not predict PPI.

Interpretation of results

To our knowledge this is the first study identifying erectile function as predictor for PPI. In the context of alternative treatment options including radiotherapy or hormone ablation prediction of PPI is of utmost importance to individually counsel patients with prostate cancer

Concluding message

Erectile function predicts PPI and should be measured preoperatively.

