

Not everything concerning the function of autonomic nerves with regards to clitoral and vaginal function, secretion of pelvic glands, function and long-term fate of urethral smooth musculature, and interaction with rhabdosphincter and pelvic floor musculature is known to date. However, with increasing knowledge we know that it is important to preserve at least part of the ganglions and nerve fibers of pelvic autonomic nerves to increase the quality of life for these patients in the long-term. In addition, it is the long-term quality of life where functional outcome is important contrary to oncological outcome, which in the first few years seems to be dominant as quality of life studies have shown.

### Reference

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## UROLOGICAL ONCOLOGY

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### **Preoperative serum testosterone level as an independent predictor of treatment failure following radical prostatectomy**

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**Objectives:** Preoperative low serum testosterone (TS) level has been reported to be associated with adverse pathologic results in patients with clinically localized prostate cancer (pCA) treated with radical prostatectomy (RP). However, prior studies failed to show prognostic impact of preoperative low TS in these patients. The aim of this study was to investigate the relationship between preoperative TS and prostate-specific antigen (PSA) failure in these patients.

**Methods:** Of 304 patients diagnosed with clinically localized pCA who had been treated with RP alone, 272 patients whose preoperative TS level had been measured were eligible for this analysis. Postoperative TS levels were also available in 222 of the 272 patients. Cox proportional hazard model was used to elucidate factors predictive for PSA failure.

**Results:** Of the 272 patients 49 had low (< 300 ng/dl) and 223 had normal preoperative TS level. In a stepwise multivariate analysis, preoperative TS ( $p = 0.021$ ) was an independent and significant predictor of PSA failure along with RP Gleason score ( $p = 0.006$ ), surgical margin status ( $p = 0.0001$ ), and PSA ( $p = 0.0001$ ). Five-year PSA failure-free survival rate of the patients with preoperative low TS (67.8%) was significantly worse than that with normal TS (84.9%) ( $p = 0.035$ ). Serum TS levels increased significantly after RP ( $p < 0.0001$ ). The increment of TS level in preoperative low TS group was significantly greater than that in preoperative normal TS group ( $p = 0.0003$ ).

**Conclusions:** The current results demonstrated that preoperative TS level is an independent and significant predictor of PSA failure after RP in patients with clinically localized pCA. *European Association of Urology*.

### Editorial Comment

Testosterone levels and prostate cancer are a topic that attracts much attention and stirs controversy. This contribution from Tokyo, Japan adds to the multifaceted database. With a cut-off at 300 ng/dL total testosterone the authors found an inverse correlation of testosterone level and prostate cancer aggressivity as measured by Gleason score, positive surgical margins, PSA, and 5-year postoperative PSA failure status.

Most interestingly, testosterone levels increased after radical prostatectomy. The postoperative increment of testosterone levels was significantly higher in the group with preoperative low testosterone. Clearly, these data deserve confirmation from other groups and elucidation of the mechanisms involved in testosterone level variation after radical prostatectomy.

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### Concomitant carcinoma in situ is a feature of aggressive disease in patients with organ-confined TCC at radical cystectomy.

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**Objectives:** Carcinoma in situ (CIS) is a nonpapillary, high-grade, potentially aggressive, and unpredictable manifestation of transitional cell carcinoma (TCC) of the bladder. The aim of this study was to assess whether presence of concomitant CIS has a detrimental effect on cancer control after radical cystectomy.

**Methods:** The records of 812 consecutive patients who underwent radical cystectomy and pelvic lymphadenectomy for bladder TCC at three US academic centres were reviewed. Ninety-nine of 812 (12%) patients had CIS only at radical cystectomy and were excluded from the analyses.

**Results:** Three hundred thirty of the 713 (46.3%) patients had concomitant CIS at radical cystectomy. Patients with TCC involvement of the urethra were more likely to have concomitant CIS than not (61% vs. 40%,  $p=0.018$ ). Concomitant CIS was significantly more common in patients with lower cystectomy stages and higher tumour grades. In univariate, but not multivariate, analysis, patients with concomitant CIS versus those without were at increased risk of disease recurrence ( $p=0.0371$ ). In patients with organ-confined disease, concomitant CIS was an independent predictor of disease recurrence ( $p=0.048$  and  $p=0.012$ , respectively) but not bladder cancer-specific mortality ( $p=0.160$  and  $p=0.408$ , respectively) after adjusting for the effects of standard postoperative features.

**Conclusions:** Concomitant CIS in the cystectomy specimen is common, and patients with concomitant CIS are at increased risk of urethral TCC involvement. The presence of concomitant CIS appears to confer a worse prognosis in patients with non-muscle-invasive TCC treated with radical cystectomy.

### Editorial Comment

The outcome of patients with bladder cancer of any stage and concomitant CIS was analyzed in this retrospective study on 713 patients undergoing radical cystectomy. Several issues deserve comments: The percentage of

CIS present increased over the years from 33% in the eighties to 52% in period from 2001 to 2003. The majority of patients had grade 3 tumors (82.5%) and/or pT2 and pT3 disease (60.8%). Roughly, half of the patients had lymphovascular invasion, one-fourth (24.9%) had lymph node metastases. Accordingly, after 5 years, half of the patients with concomitant CIS had recurrences and half of the patients with concomitant CIS had died from bladder cancer. Patients without concomitant CIS fared better than those with concomitant CIS (7-year recurrence-free survival 58.1% and 41.5%, respectively). Interestingly, the incidence of concomitant CIS was highest in patients with organ-confined disease (pTa excluded) and higher in lower-stage and higher grade disease. Involvement of the urethra was more common in CIS patients.

The authors state correctly, that presence of concomitant CIS worsens the outcome significantly. In practical terms, early radical treatment should be considered if CIS is present.

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## NEUROUROLOGY & FEMALE UROLOGY

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### **Urodynamic studies in women with stress urinary incontinence: Significant bacteriuria and risk factors**

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**Aim:** A prospective study was performed to determine the incidence of significant bacteriuria and to identify the risk factors for bacteriuria after urodynamic studies (UDSs) in women with urodynamic stress urinary incontinence (SUI).

**Methods:** A total of 225 women with urodynamic SUI were evaluated. All women were negative on double-screened urine cultures, in clean-catch midstream urine (MSU) specimens, before UDS. Another urine specimen was obtained for urinalysis and culture at 3-7 days after UDS. Urinary culture with 10(5) CFU/ml or more was regarded as significant bacteriuria. To identify the risk factors for significant bacteriuria, the clinical characteristics of all patients including age, BMI, parity, medical and operation history, degree of pelvic organ prolapse, results of urinalysis, and UDS were evaluated.

**Results:** The prevalence of significant bacteriuria was 6.2%. The most common identified microorganism was *Escherichia coli* (57.1%). Univariate analysis demonstrated that a history of recurrent urinary tract infection (UTI;  $P = 0.002$ ) and urological surgery or procedure ( $P = 0.02$ ) were significant predictors of significant bacteriuria. On multiple logistic regression analysis the past history of recurrent UTI was the only significant independent risk factor (OR = 28.5, 95% CI = 4.309-188.488,  $P = 0.009$ ).

**Conclusions:** This study suggests that for most women with SUI it may be unnecessary to use preventive prophylactic antibiotics in UDS. However, our results suggest that in patients with a previous history of recurrent UTI or urologic surgery the risk for significant bacteriuria is increased and use of prophylactic antibiotics should be considered. *Neurourol. Urodynam. 26:847-851, 2007. (c) 2007 Wiley-Liss, Inc.*