Conditions of impaired wound healing in the elderly are associated with substantial morbidity and mortality and impose a significant financial burden upon the world's health services. The findings of a series of recent studies have served to highlight the contrasting contributions made by sex steroid hormones to the regulation of cutaneous repair processes. Although estrogens accelerate healing, the actions of the "male" sex hormones 5alpha-dihydrotestosterone and testosterone are primarily deleterious. The shift that occurs in the balance between serum estrogen and androgen levels as a normal feature of human aging may therefore have important consequences for fundamental tissue repair processes.

Editorial Comment

The paper outlines nicely the effect of sex hormones on wound healing. Topical and systemic estrogen applications have been shown to both increase acute healing and to prevent the development of a chronic wound status. A similar beneficial effect for wound healing was seen with the precursor of both androgenic and estrogenic effector molecules, dehydroepiandrosterone (DHEA). Both estrogens and DHEA dampen local inflammation and promote matrix deposition. The modulation of inflammatory responses by sex hormones is partially regulated by modulating macrophage function, which in turn leads to changes in TNF-alpha production, macrophage migration inhibitory factor secretion, and IL-6 expression.

In contrast, androgens seem to be negative regulators for wound healing suggesting that they retard repair processes and enhance the local inflammatory response. All surgeons including those dealing with flaps used in reconstructive urology are confronted with impaired wound healing possibly resulting in chronic wound healing states. Topical and systemic estrogen treatment as well as dehydroepiandrosterone may help to overcome some of the problems of flap or other reconstructive interventions and its sometimes peculiar problems regarding healing. This may be of particular importance in elderly patients were particularly estrogen and DHEA deficiency is thought to be the cause of age-related impaired wound healing. One should also think about using systemic hormonal replacement therapy in female patients prior to complex reconstructive surgery in order to reduce chronic wound problems.

Dr. Karl-Dietrich Sievert &
Dr. Arnulf Stenzl
Department of Urology
Eberhard-Karls-University Tuebingen
Tuebingen, Germany

UROLOGICAL ONCOLOGY

Outcome of Surgery for Clinical Unilateral T3a Prostate Cancer: A Single-Institution Experience

Hsu CY, Joniau S, Oyen R, Roskams T, Van Poppel H
Department of Urology, University Hospitals KULeuven, Leuven, Belgium
Eur Urol. 2007; 51: 121-8; discussion 128-9

Objectives: The optimal management of locally advanced prostate cancer (cT3) is still a matter of debate. The objective of this study is to present 10-year outcomes of radical prostatectomy (RP) in unilateral cT3a disease. Patients and Methods: Between 1987 and 2004, 2273 patients underwent RP at our institution. Two hundred and thirty-five (10.3%) patients were assessed as unilateral cT3a disease by digital rectal examination. Thirty-five patients who received neoadjuvant treatment before surgery were excluded from further analysis. Mean

follow-up was 70.6 months. Kaplan-Meier survival analysis was used to calculate the biochemical progression-free survival (BPFS), clinical progression-free survival (CPFS), cancer-specific survival (CSS), and overall survival (OS) rates. Cox uni- and multivariate regression analyses were used to identify predictive factors in BPFS and CPFS.
Results: Clinical overstaging (pT2) occurred in 23.5%. One hundred and twelve (56%) patients received adjuvant or salvage therapy. OS at 5 and 10 years was 95.9% and 77.0%, respectively, and CSS was 98.7% and 91.6%. BPFS at 5 and 10 years was 59.5% and 51.1%, respectively, and CPFS was 95.9% and 85.4%. Margin status was a significant independent predictor in BPFS; cancer volume was a significant independent predictor in CPFS.
Conclusions: Clinically advanced prostate cancer is still frequently overstaged. In a well-selected patient group with locally advanced prostate cancer, RP—with adjuvant or salvage treatment when needed—can yield very high long-term cancer control and survival rates. Margin status and cancer volume are significant predictors of outcome after RP.

Editorial Comment
The outcomes of clinically unilateral T3 cancer after surgical treatment are presented. In 22% the patients received adjuvant and in 34% they received salvage hormonal or radiation treatment.

Generally the outcomes are relatively good with only 10% cancer mortality after 10 years. The authors claim a high rate of overstaging in 23.5 % which leaves some doubt in the preoperative staging procedures, e.g. was TRUS performed preoperatively? Further aspects still might be debatable and are also addressed in the comments to this paper. At least one point of debate might be added. What happened to bilateral T3 patients and why were these excluded? The authors compare their results with radiotherapy results from historical trials but I do not remember this exclusion criterion in these radiotherapy trials.

In conclusion, both surgical and radiation therapy approaches seem justified in the treatment of locally advanced prostate cancer.

Dr. Andreas Bohle
Professor of Urology
HELIOS Agnes Karll Hospital
Bad Schwartau, Germany

Discrepancy between Clinical and Pathologic Stage: Impact on Prognosis after Radical Cystectomy

Shariat SF, Palapattu GS, Karakiewicz PI, Rogers CG, Vazina A, Bastian PJ, Schoenberg MP, Lerner SP, Sagalowsky AI, Lotan Y
Department of Urology, University of Texas Southwestern Medical Center, Dallas, Texas 75390-9110, USA
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Objectives: We compared clinical and pathologic staging in a large, contemporary, consecutive series of patients who were treated with radical cystectomy and pelvic lymphadenectomy, and determined the effect of stage discrepancy on outcomes.
Methods: We collected retrospective data from 778 consecutive patients with bladder transitional cell carcinoma who were treated with radical cystectomy and pelvic lymphadenectomy, and for whom the clinical and pathologic stage were available.

Results: Pathologic upstaging occurred in 42% of patients, and pathologic downstaging occurred in 22%. Forty percent of patients with non-muscle-invasive clinical stage had muscle-invasive pathologic stage. Thirty-six percent of patients with organ-confined clinical stage had non-organ-confined pathologic stage (> or = pT3N0 or pTanyN-positive). Patients with higher clinical stage were more likely to be upstaged to non-organ-confined disease ($p < 0.001$). Patients were stratified into three groups: pathologically upstaged, same clinical and pathologic stage, and pathologically downstaged. When adjusted for the effects of standard postoperative features, upstaged patients were at a significantly higher risk of disease recurrence and bladder cancer-specific death than patients who had the same pathologic and clinical stage, who in turn were at significantly higher risk than downstaged patients. This observation remained true within each clinical stage strata. Within each pathologic stage strata, clinical stage did not substratify into different risk groups.
Conclusions: Clinical to pathologic stage discrepancy is a relatively common finding after extirpative surgery for bladder cancer. Clinical outcomes after radical cystectomy are largely driven by pathologic stage. Better clinical staging is necessary to improve patient evaluation and management.

Editorial Comment
A large series of 778 patients with infiltrative bladder cancer undergoing radical cystectomy was retrospectively analysed and the impact of staging error calculated.

Most interestingly – and not debated much in this paper – is the fact that the percentage of correct peroperative staging declined (!) over the years with correct staging around 44% until 1994 and around 35% and lower from 1995 to 2003. What happened in these periods? Was there an institutional change or did surgeons not perform TURB as thoroughly as before?

Notably, downstaging moderately decreased from 26% to around 20% during these years whereas upstaging sharply increased (!) from around 28% to 43% and 49% in the later periods mentioned above.

The outcomes of pathologically staged cancer finally were in the expected range with rather good results showing roughly 80% bladder cancer specific survival in organ confined disease as compared to 37% in non organ-confined disease.

These data again seem to justify adjuvant chemotherapy in this high-risk group of patients.

Dr. Andreas Bohle
Professor of Urology
HELIOS Agnes Karll Hospital
Bad Schwartau, Germany

NEUROUROLOGY & FEMALE UROLOGY

Voiding Dysfunction Following Removal of Eroded Synthetic Mid Urethral Slings

Starkman JS, Wolter C, Gomelsky A, Scarpero HM, Dmochowski RR
Department of Urologic Surgery, Vanderbilt University Medical Center, Nashville, TN, USA
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Purpose: Voiding dysfunction following genitourinary erosion of synthetic mid urethral slings is not clearly reported. We investigated the incidence of voiding dysfunction in patients following sling excision due to vaginal, urethral or intravesical mesh erosion.