

Should we abandon sling operations in women with stress urinary incontinence? By no means. The majority of the patients can be successfully treated if the indication for the operation was appropriate. The fact that some of the sling operations can be done under regional or local anesthesia and with a short operating time should not make such a procedure the operation of choice for all women with stress urinary incontinence. An additional important fact is the type of sling material used. Whenever possible a material taken from the patient to be operated such as rectus fascia or fascia lata is the material of choice because it considerably reduces both urethral erosions and possible systemic side effects of cadaveric or xenograft materials.

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UROLOGICAL ONCOLOGY

Cancer progression and survival rates following anatomical radical retropubic prostatectomy in 3,478 consecutive patients: long-term results

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Purpose: We updated a long-term cancer control outcome in a large anatomical radical retropubic prostatectomy (RRP) series. We also evaluated the perioperative parameters that predict cancer specific outcomes following surgery.

Materials and Methods: From May 1983 to February 2003, 1 surgeon (WJC) performed RRP in 3,478 consecutive men. Patients were followed with semiannual serum prostate specific antigen (PSA) tests and annual digital rectal examinations. We used Kaplan-Meier product limit estimates to calculate actuarial 10-year probabilities of biochemical progression-free survival, cancer specific survival and overall survival. Multivariate Cox proportional hazards models were used to determine independent perioperative predictors of cancer progression.

Results: At a mean followup of 65 months (range 0 to 233) actuarial 10-year biochemical progression-free, cancer specific and overall survival probabilities were 68%, 97% and 83%, respectively. On multivariate analysis biochemical progression-free survival probability was significantly associated with preoperative PSA, clinical tumor stage, Gleason sum, pathological stage and treatment era. Cancer specific survival and overall survival rates were also significantly associated with clinicopathological parameters.

Conclusions: RRP can be performed with excellent survival outcomes. Favorable clinicopathological parameters and treatment in the PSA era are associated with improved cancer control.

Editorial Comment

This paper is very valid as it describes the long-term outcome of a very large cohort of patients after radical prostatectomy. Notably, all patients have been operated by a single surgeon (W. Catalona), thus certifying best results by a high-volume urologist. The most interesting results are given as PSA progression-free survival data (defined as detectable PSA > 0.2 ng/mL) and are therefore comparable to other, especially nonsurgical data (see following comment). Biochemical progression was 20% at 5 and 32% at 10 years. A closer look into the Kaplan Meier curves reveals more truth: in very low-risk patients with PSA < 2.6 ng/mL around 10%

showed PSA progression after 150 months, for PSA 2.6 - 4 ng/mL roughly 20% and PSA 4 -10 ng/mL roughly 25% had biochemical progression after 150 months. Notably, these patients are considered low risk. With PSA > 10 less than 50% of patients remained progression free after 150 months. Another look is worthwhile on the curve showing Gleason grades and biochemical progression. In Gleason 2-6 around 20% of patients have failed after 100 months of follow-up, with a continuously decreasing curve. Altogether these data give a clear view on the advantages and especially, the limits of radical prostatectomy and should be considered if this procedure is advocated to men with prostate cancer.

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Prostate cancer in a large prostate is associated with a decreased prostate specific antigen failure rate after brachytherapy

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Purpose: A large prostate has been found to correlate with improved prostate cancer survival in men undergoing radical prostatectomy. In the current study we analyzed the relationship of prostate size and prostate specific antigen (PSA) failure in men undergoing brachytherapy for localized prostate cancer.

Materials and Methods: We studied data on 613 men who had undergone I radioactive seed implantation. Average patient age +/- SD was 65 +/- 7.2 years. Average prostate volume ultrasonically measured at seed insertion was 40 +/- 15 ml. All patients had a minimum of 2 years of followup.

Results: Men with a large prostate had increased freedom from failure compared to men with a small prostate. Failure time in men with an intermediate size prostate was between that for large and small prostates. This difference in failure rates was significant (log rank test $p = 0.0002$). We further analyzed our data with Cox regression. Large prostate size significantly correlated with increased time to PSA failure ($p = 0.013$) and it was independent of the significant effects of Gleason score, PSA, disease stage ($p < 0.001$), minimal radiation dose covering 90% of prostate volume ($p = 0.008$) and hormone treatment, including androgen ablation ($p = 0.001$).

Conclusions: Some investigators have postulated that paracrine signals acting to regulate epithelial proliferation in benign prostatic hypertrophy have beneficial influences on coexistent prostate cancer. Our finding that the effect of prostate size is independent of Gleason score, PSA and disease stage supports the paracrine signal mechanism. If a circulating substance, such as a cytokine, might be responsible for improved survival, this substance might be useful for treating prostate cancer. Moreover, since we found that prostate size is independent of PSA, Gleason score and tumor stage for predicting outcome, we hypothesize that patients with a small prostate treated with brachytherapy might benefit from hormone treatment and larger radiation doses. These measures are now generally reserved for men with more advanced tumors, higher PSA and increased Gleason scores.

Editorial Comment

On first approach the data on the treatment of prostates of different sizes by brachytherapy are given. In a closer look this paper bears outcome data of one of the largest cohorts of permanent interstitial seed (LDR) brachytherapy treated patients with a long term follow up of 140 months. Therefore, this paper should be read

carefully and be compared to the above cited on.

Again, outcomes for low, intermediate and high-risk patients are given as PSA-progression-free survival data (defined as 3 consecutive PSA increases, ASTRO criteria).

In low-risk patients around 95% had no progression after 140 months. For intermediate risk patients roughly 12% and for high-risk patients roughly 45% had biochemical progression after 140 months. Interestingly, the curves do not show any further decrease and remain linear 75 months after treatment. With these 2 papers in mind, brachytherapy can no longer be considered an inferior therapeutic option to radical prostatectomy in men with localized prostate cancer.

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FEMALE UROLOGY

Preoperative pressure-flow studies: useful variables to predict the outcome of continence surgery

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Objective: To determine whether the acceleration of flow rate (AFR), pressure flow variables and urethral pressure profilometry (UPP) measurements might have a role in evaluating women with urodynamic stress incontinence (USI), to predict the surgical outcome and de novo detrusor overactivity after Burch colposuspension.

Patients and Methods: Women with a urodynamic diagnosis of USI (209) who had a modified Burch colposuspension were assessed retrospectively. The AFR, the opening (ODP) and closing detrusor pressure (CDP), DP at maximum flow rate and UPP values were calculated for each woman before surgery.

Results: The preoperative AFR was significantly higher in women who developed de novo detrusor overactivity after surgery. The women who had persistent USI after colposuspension had significantly lower preoperative ODP and CDP than women who were continent after colposuspension. Other variables were not significantly different between the groups of women.

Conclusions: The AFR and ODP appear to be useful preoperative measures to predict the outcome of continence surgery and the emergence of de novo detrusor overactivity.

Editorial Comment

The authors review a population of patients who underwent Burch colposuspension and analyze urodynamic variables (acceleration of flow rate, pressure flow variables and urethral pressure profiles) both preoperatively and postoperatively. The findings were then used to examine their predictive power for surgical outcome and de novo detrusor overactivity. The authors found that acceleration of flow rate and opening detrusor pressure appears to have promise as a preoperative gauge in the incidence of de novo detrusor overactivity while urethral pressure profiles did not provide any particularly illuminating factor.

The authors should be commended for their thorough review of urodynamic variables to help assist the surgeon in predicting and potentially avoiding inadvertent outcomes from anti-incontinence surgery. Their discussion of acceleration of flow rate is interesting for this urodynamic test does not have an extremely popular