UROLOGICAL ONCOLOGY

Low serum testosterone levels are associated with positive surgical margins in radical retropubic prostatectomy: hypogonadism represents bad prognosis in prostate cancer

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Purpose: It has been reported that more aggressive prostate cancer (PC) can be associated with low serum testosterone levels. The relationship between serum androgens and PC is still not completely understood. In this study we examined the association of prognostic factors in men who underwent radical retropubic (RRP) prostatectomy with low or normal total testosterone.

Materials and Methods: We retrospectively evaluated 64 consecutive patients with localized PC treated with RRP between July 2002 and November 2003. PC was diagnosed by transrectal ultrasonography guided biopsy performed for either a suspicious digital rectal examination or serum prostate specific antigen greater than 4.0 ng/mL. Gleason score was determined in prostatic biopsies. Pathological TNM staging (1997), capsular perforation, seminal vesicle involvement and surgical margin status were determined in all surgical specimens. The threshold for serum total testosterone was 270 ng/dL. In all analyses $p < 0.05$ was considered statistically significant.

Results: There were no statistically significant differences among prostate specific antigen, Gleason score (biopsy or specimen), pathological stage, capsular perforation and seminal vesicle involvement. However, patients with low total testosterone had increased positive surgical margins ($p = 0.026$).

Conclusions: Patients with low total testosterone more frequently present with positive surgical margins in RRP specimens. The true association between low testosterone and poor clinical outcome in the long term needs validation in large prospective studies.

Editorial Comment

Prostate cancer is hormone dependent. Suppression of androgen levels inhibits cancer growth, at least for a while. Does this statement justify the inverse assumption that high androgen levels support growth of prostate cancer in males? The authors from Brazil address this important topic in correlating the histological parameters of prostatectomy specimen with androgen levels in the respective patients. No correlation was found except that patients with low testosterone had more positive margins. Interestingly, testosterone levels were significantly increased after the operation.

Thus, upon first view, testosterone seems to be inversely correlated to cancer growth in males. Other researches on the cellular testosterone receptor also support this notion.

Certainly, more data from much larger patient cohorts are needed to clarify this important issue.

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Treatment delay and prognosis in invasive bladder cancer

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Purpose: We studied treatment delay, and the impact on disease specific survival and stage progression in a series of patients who had undergone cystectomy.

Materials and Methods: All 141 patients underwent radical cystectomy between 1990 and 1997 due to locally advanced bladder cancer. Treatment delay was defined as time from pathological confirmation of invasive disease to performance of cystectomy, and was registered retrospectively from the patient charts. Two patients received neoadjuvant chemotherapy and were excluded from further analyses. Followup continued until April 2003 with death due to bladder cancer as the end point. Causes of death were retrieved from the Swedish Cause of Death Registry.

Results: The median treatment delay was 49 days, but was significantly longer for the 71 cases who were referred from other hospitals (63 vs 41 days, $p < 0.001$). Treatment delay did not influence cumulative incidence of death from bladder cancer. Considering all cases, there was no significant correlation between treatment delay and stage progression. For clinical stage T2 tumors, median treatment delay was 76 days among patients with stage progression compared to 41 and 48 days for those with stage regression and stage equivalence, respectively ($p = 0.20$).

Conclusions: Treatment delay was not found to influence disease specific survival in the present study. Furthermore, treatment delay was not significantly longer in cases that progressed compared to those with equal or lower pathological stage in the cystectomy specimen.

Editorial Comment

Does delay of radical cystectomy confer an increased risk of progressive bladder cancer? Several authors have addressed this issue with contradictory results. These authors from Sweden did not find an influence if radical treatment was given before or after 60 days post diagnosis. Median time to surgery (treatment delay) was only 48 days among those alive at the end of follow-up and 4 days longer (52 days) among those who died of bladder cancer.

Why did the authors chose 60 days threshold? It seems that in a relatively well-organised health care system as in Sweden a relevant delay (> 90 days or 3 months) is a rare event. It is noteworthy to read the editorial comment from M. Cookson who states that the window for curability is not open for all time and may begin to close from 90 days.

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FEMALE UROLOGY

The effect of fluid intake on urinary symptoms in women

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Purpose: We determined the effect of caffeine restriction and fluid manipulation in the treatment of patients with urodynamic stress incontinence and detrusor overactivity.