Abstract

**PURPOSE:** Treatment in patients with a positive surgical margin after radical retropubic prostatectomy is controversial. Options are observation, radiation therapy and early hormone therapy. Making the appropriate choice should be based on an understanding of the risk of recurrence without treatment.

**MATERIALS AND METHODS:** We reviewed the records of 1,383 patients after radical retropubic prostatectomy was performed by a single surgeon. All specimens were analyzed by a single pathologist. Of the patients 936 met criteria for analysis.

**RESULTS:** Mean followup in these 936 patients was 45.8 months (minimum 12). The overall PSA biochemical recurrence rate was 11.5% (108 of 936 cases). Of the 936 patients 350 (37%) had tumor at an inked margin. These patients had a recurrence rate of 19% (67 of 350), while patients with negative margins had a recurrence rate of 7% (41 of 586). This difference was statistically significant (p <0.01). Multivariate HR analysis revealed that significant risk factors for recurrence in the 936 patients were PSA greater than 20 ng/ml, clinical stage T2 or greater, Gleason 7 or greater, seminal vesicle involvement, extraprostatic extension, a visual estimate of prostate cancer volume of greater than 9.1% and positive surgical margins. Statistically significant risk factors for recurrence in patients with a positive margin on multivariate HR analysis were PSA greater than 20 ng/ml, Gleason score 7 or greater and seminal vesicle involvement.

**CONCLUSIONS:** Although the positive margin rate in this series was 37%, the recurrence rate in these patients was only 19%. It is important to consider other factors, such as PSA, Gleason score, seminal vesicle involvement and extraprostatic extension, when making treatment decisions.

PMID: 16406892 [PubMed - indexed for MEDLINE]