Biochemical recurrence rates are similar for pT2-positive surgical margins and pT3a.

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Abstract

OBJECTIVE: Histological details of positive surgical margins in radical prostatectomy specimens have been related to outcome after surgery in rare studies recently published. Our objective is to assess whether the status of surgical margins, the extent and the Gleason score of positive margins, and the extent of the extraprostatic extension are predictive of biochemical recurrence post-radical prostatectomy.

MATERIALS AND METHODS: Three hundred sixty-five radical prostatectomy specimens were analyzed. The length of the positive surgical margin and extraprostatic extension and the Gleason score of the margin were recorded. Statistical analyses examined the predictive value of these variables for biochemical recurrence.

RESULTS: 236 patients were stage pT2R0, 58 pT2R1, 25 pT3R0 and 46 pT3R1. Biochemical recurrence occurred in 11%, 31%, 20% and 45.7% of pT2R0, pT2R1, pT3R0 and pT3R1, respectively. The extent of the positive surgical margins and the Gleason score of the positive surgical margins were not associated with biochemical recurrence in univariate analysis in a mean follow up period of 35.9 months. In multivariate analyses, only the status of the surgical margins and the global Gleason score were associated with biochemical recurrence, with a risk of recurrence of 3.1 for positive surgical margins and of 3.8 for a Gleason score > 7.

CONCLUSION: Positive surgical margin and the global Gleason score are significant risk factors for biochemical recurrence post-radical prostatectomy, regardless of the extent of the surgical margin, the extent of the extraprostatic extension, or the local Gleason score of the positive surgical margin or extraprostatic tissue. pT2R1 disease behaves as pT3R0 and should be treated similarly.