Prostate cancer that is within 0.1 mm of the surgical margin of a radical prostatectomy predicts greater likelihood of recurrence.

Izard JP, True LD, May P, Ellis WJ, Lange PH, Dalkin B, Lin DW, Schmidt RA, Wright JL.

Abstract

Surgical margin status at prostatectomy is an important predictor of biochemical recurrence (BCR). The current convention is to categorize a margin as negative if tumor cells are not at the inked margin, even if they are within a few cells of the margin. We hypothesized that cancer within 0.1 mm of the margin conferred an increased risk for BCR. We determined the risk for BCR on the basis of surgical margin status in a cohort of 1588 patients who underwent radical prostatectomy for prostate cancer (PCa) between 1998 and 2011. Surgical margins were categorized as positive, close (<0.1 mm from tumor cells), or negative. Multivariate hazard ratios (HRs) for BCR were determined by margin status. We identified 1588 patients, of whom 193 had PCa recurrence. The margin status was negative in 1058 (67%), close in 232 (15%), and positive in 298 (19%). Cancer that was close to the margin was a significant and independent predictor of BCR (HR 1.53; 95% confidence interval, 1.00-2.32) and was not statistically different than a positive surgical margin (HR 2.10; 95% confidence interval, 1.48-2.99). Cancer that is within 0.1 mm of the surgical margin of a prostatectomy is associated with an increased risk for PCa recurrence. Patients with that margin status may be reasonable candidates for adjuvant local therapy.

PMID: 24525503 [PubMed - indexed for MEDLINE]