Bilaterally Positive Biopsy Cores Are Associated with Non-Organ-Confined Disease in Prostate Cancer Patients Eligible for Active Surveillance.

Umbehr MH, Largo RA, Gfeller S, Tremp M, Poyet C, Paul M, Sulser T, Müntener M.

Abstract

Purpose: To investigate the association between the laterality of diagnostic prostate cancer-positive biopsy cores and definitive tumor stage on final pathology (organ-confined versus non-organ-confined). Patients and Methods: This is a retrospective analysis of 165 men after radical prostatectomy fulfilling our active surveillance criteria at the time of surgery. Nominal variables were compared using Fisher's exact test, continuous variables using Mann-Whitney test. Odds ratios including 95% Wald and probabilities including 95% Wilson confidence intervals are provided. Results: 5 (3%) patients had non-organ-confined disease: 2 out of 144 (1%) patients with unilateral and 3 out of 17 (18%) patients with bilateral cancer-positive biopsy cores (p = 0.009). The estimated odds ratio for non-organ-confined disease was 14.67 (95% confidence interval 1.55-189.23) for patients with bilateral compared to patients with unilateral cancer-positive biopsy cores. The sensitivity, specificity and accuracy of bilaterally positive biopsies as an additional criterion to identify non-organ-confined disease are 60, 91 and 90%, respectively. Conclusion: In our cohort, patients with bilaterally positive biopsy cores were significantly more likely to harbor a non-organ-confined tumor than patients with unilaterally positive cores. Due to their high specificity, bilaterally positive biopsies may represent a reasonable exclusion criterion for active surveillance if our results are corroborated in further studies. © 2014 S. Karger AG, Basel.

PMID: 24643133 [PubMed - as supplied by publisher]