Preoperative Androgen Deprivation Therapy for Localized Prostate Cancer: Delayed Biochemical Recurrence in High-Risk Disease.

Pal SK, Ruel N, Vogelzang N, Chang M, Wilson TG, Jones JO, Yuh B.

Department of Medical Oncology, City of Hope Comprehensive Cancer Center, Duarte, CA. Electronic address: spal@coh.org.
Division of Biostatistics, Department of Information Science, City of Hope Comprehensive Cancer Center, Duarte, CA.
US Oncology Research, Comprehensive Cancer Centers, Las Vegas, NV.
Department of Medical Oncology, City of Hope Comprehensive Cancer Center, Duarte, CA.
Division of Urology, Department of Surgery, City of Hope Comprehensive Cancer Center, Duarte, CA.
Department of Molecular Pharmacology, City of Hope Comprehensive Cancer Center, Duarte, CA.

Abstract

BACKGROUND: The role of preoperative ADT for localized prostate cancer is controversial; prospective assessments have yielded varying results. We sought to define a subset of patients with a higher likelihood of benefit from preoperative ADT.

PATIENTS AND METHODS: An institutional database including consecutive patients receiving definitive surgery for localized prostate cancer was interrogated. Patients recorded as having received preoperative ADT were matched in a 1:2 fashion to patients who had not received previous ADT. Patients were matched on the basis of clinicopathologic characteristics, use of adjuvant treatment strategies, and duration of prostate-specific antigen follow-up. Time to biochemical recurrence (TTBR) was compared using the Kaplan-Meier method and log-rank test for the overall study population and in subsets defined according to D'Amico risk.

RESULTS: No significant differences in clinicopathologic characteristics were noted between recipients (n = 101) and matched nonrecipients (n = 196) of preoperative ADT. Although not statistically significant, positive surgical margin rates, seminal vesicle invasion, and extracapsular extension were less frequent in patients receiving preoperative ADT. Furthermore, a lesser incidence of perioperative complications was noted in this group (7.4% vs. 18.4%). No significant differences were noted in TTBR between recipients and nonrecipients of preoperative ADT in the overall study population. However, among patients with high-risk disease, TTBR was significantly longer in patients who had received preoperative ADT (P = .004).

CONCLUSION: The data presented herein suggest a potential benefit of preoperative ADT in patients with high-risk localized prostate cancer. Consideration should be given to enriching for this subset in preoperative studies of novel endocrine therapies.

Copyright © 2013 Elsevier Inc. All rights reserved.