GERIATRIC UROLOGY

Low risk prostate cancer in men ≥ 70 years old: To treat or not to treat

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Objectives: Prostate cancer (CaP) in the aging male will become an increasingly important and controversial health care issue. We evaluated the outcomes between a variety of treatments for low-risk CaP in patients 70 years of age and older.
Methods and Materials: A total of 3,650 men diagnosed with CaP between 1989 and 2009 were identified in the Center for Prostate Disease Research database to be 70 years of age or older at time of diagnosis. Of these patients, 770 men met the D'Amico criteria ([13]) for low-risk disease and were treated with radical prostatectomy, external beam radiation therapy, or watchful waiting. Cox proportional hazard models were used to compare clinicopathologic features across treatment groups. Kaplan-Meier analysis was used to compare biochemical recurrence-free, progression-free, and overall survival.
Results: Of the 770 patient cohort, 194 (25%) chose radical prostatectomy, 252 (33%) chose external beam radiation therapy, and 324 (42%) were initially managed by watchful waiting with 110 (34%) of this subset ultimately undergoing secondary treatment. The median follow-up was 6.4 years. There were no significant

differences in distributions of race/ethnicity, number of medical comorbidities, or clinical stage across the treatment groups. Patients managed on watchful waiting without secondary treatment had the poorest overall survival on Kaplan-Meier analysis (P = 0.0001). Additionally, multivariate analysis confirmed this result for watchful waiting without secondary treatment as being a statistically significant predictor of overall mortality (HR 1.938, P = 0.0084).

Editorial Comment

There are clearly multiple biases confounding the results presented in this series as recognized by authors. Considering the study limitations, disease specific survival would limit confusing related to age and co-morbidities and is not informed in the article. However, Kaplan-Meier biochemical recurrence-free survival curves across treatment groups failed to achieve statistical significance (P = 0.08), envisaging similar disease specific survival across analyzed groups.

Furthermore, given the relatively short follow up time of watchful waiting (WW) without secondary treatment group - median (range) 4.3 (0.8–16.6) years, an expressive cancer specific mortality is not expected for patients genuinely presenting D'Amico criteria for low-risk disease (stage T1-2a, Gleason score ≤ 6, and PSA < 10 ng/mL).

On multivariable cox proportional hazards model predicting overall mortality, age at diagnosis, number of comorbidities and WW with no secondary treatment were the only statistically significant variables. Adds to that the fact that the mean age at diagnosis was lower in the primary RP group (72.2 ± 1.9) compared with the EBRT (74.1 ± 3.1), WW (75.7 ± 3.8), and WW with secondary treatment (74.5 ± 3.6) groups (P < 0.0001).

Last but not least, while important information such as the detailed protocol for those under WW was not described (number of cores per biopsy, number of biopsies, etc), neither the number of patients who despite disease progression kept under WW, it is fundamental to highlight that most of the described patients in this study present performance for active surveillance rather than WW. In this regard, treatment indication, timing and intent have different endpoints being symptoms, late and palliative for WW and biopsy, early and curative for active surveillance, respectively.

Certainly, most of these patients will not likely progress to the point of metastases, or cancer-specific death before they die of another cause if under well conducted and more stringent active surveillance protocol compared to WW.

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