Fewer weeks of hormone therapy before radiation reduces side effects in intermediate risk PCa

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A shorter course of androgen suppression therapy prior to radiation therapy, when compared to a longer course of androgen suppression therapy, yields favorable outcomes and fewer adverse effects for intermediate-risk prostate cancer patients, according to research presented today at the American Society for Radiation Oncology's (ASTRO) 55th Annual Meeting. The study confirmed a disease-specific-survival (DSS) rate of 95 percent when patients received fewer weeks of neoadjuvant (NEO) total androgen suppression (TAS).

The multi-institutional phase III trial, Radiation Therapy Oncology Group (RTOG) 9910, evaluated 1,490 intermediate-risk prostate cancer (PCa) patients from 152 institutions in the U.S. and Canada. Patients were accrued from 2000 to 2004 and followed for an average of 9 years, and the average age of the men was 71 at the time of accrual. The patients were stratified and randomized into two groups?Group 1 consisted of 752 patients who received eight weeks of NEO TAS, and Group 2 consisted of 738 patients who received 28 weeks of NEO TAS. Both groups then received eight weeks of external beam radiation therapy (RT) and concurrent TAS.

Cumulative incidence was used to estimate and test efficacy for DSS, prostate-specific antigen (PSA) failure, locoregional tumor progression and distant metastasis. Overall survival (OS) rates were estimated via the Kaplan-Meier method and efficacy tested with log rank. There were 30

PCa deaths in Group 1, for a 10-year DSS rate of 95 percent; and 24 PCa deaths in Group 2, for a 10-year DSS rate of 96 percent (no statistical difference). There were 200 additional deaths not attributable to PCa in Group 1 for a 10-year OS rate of 66 percent, and 196 such deaths in Group 2, for a 10-year OS rate of 67 percent. By 10 years, 27 percent of patients had a PSA failure (using the newer RTOG-ASTRO definition of nadir+2), 5 percent had PCa recurrence in the prostate (locoregional) and 6 percent had distant metastasis. Hot flashes and erectile dysfunction were more common in Group 2.

"Sometimes, preliminary research leads us to assume that more treatment is better, but this study serves as a strong cautionary note to put the promising treatment to the test," said Thomas Pisansky, MD, lead author of the study and professor of radiation oncology at the Mayo Clinic in Rochester, Minn. "Overall, both groups had very, very good outcomes, but patients assigned to Group 2 had more side effects from androgen suppression than Group 1, who received only eight weeks of NEO TAS. Now, investigators know the upper boundary of how much androgen suppression is needed in this group of patients. The results have substantial importance because they can alter the research strategy to one in which investigation can now concentrate on ways to simplify the treatment and further reduce side effects."

More information: The abstract, "Radiation Therapy Oncology Group 9910: Phase III Trial to Evaluate the Duration of Neoadjuvant (NEO) Total Androgen Suppression (TAS) and Radiation Therapy (RT) in Intermediate-Risk Prostate Cancer (PCa)," will be presented in detail during the Plenary session at ASTRO's 55th Annual Meeting at 2:00 p.m. Eastern time on September 23, 2013.

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