Journal of Clinical & Cellular Immunology
ISSN: 2155-9899
OPEN ACCESS Freely available online
Commentary

Prostate Cancer: An Overview

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COMMENTARY

In men prostate cancer is one of the most commonly diagnosed forms of cancer and affects thousands of men each year. One of the core treatment strategies is hormone therapy, but it is only effective for a certain period of time. Solid organ transplant recipients can have between a 2 to 3 time's higher risk of developing certain cancers including non-Hodgkin lymphoma, colorectal cancer, kidney cancer, and lung cancer. Hall and colleagues reviewed 164,156 SOTRs in the United States between 2000 and 2008 and found a total of 350 cases of prostate cancer. Patients older than 60 years who are receiving heart transplants had the highest 5 year cumulative incidence of prostate cancer, at 3.65%. SOTR groups that were found to have 5 year cumulative incidence similar to or greater than the general population at age 50 years (2.34%) were kidney, liver, and lung recipients between 51 and 60 years or older and heart recipients between age 36 to 50 years or older.

Approximately 1 in 9 men will be diagnosed with prostate cancer during their lifetime, and it is the second leading cause of cancer death for men in the United States. Furthermore, CVD is a leading cause of death in men who have a history of prostate cancer. 37% of patients had at least one negative biopsy during active surveillance, including 15% with consecutive negative biopsies. The clinical pathway established mHF-EBRT as the recommended treatment for patients with low- and intermediate-risk prostate cancer pursuing curative EBRT monotherapy. To guide planning, the clinical pathway modification provided normal-tissue dose constraints. Among a total 560 patients who received EBRT monotherapy, use of mHF-EBRT grew from just 3.7% in 2015-2016 to 85.6% in 2018, researchers reported. Use of conventionally fractionated EBRT dropped from 96.3% to 14.4%. Antibody-drug conjugate could be step toward selective treatment for neuroendocrine prostate cancer.

Although fewer men are being diagnosed with localized prostate cancer, more are being diagnosed with distant-stage disease, for which only about one-third survive beyond 5 years after diagnosis. Although it is one of the most common cancers worldwide, prostate cancer remains one of the few major cancers for which the familiar, numerical staging system ranging from stage 1 to stage 4 has not been adopted into national guidelines for treatment or for the testing of new medicines in clinical trials. Gleason grade of cell abnormality and prostate-specific antigen levels, also known as PSA levels. And STAR-CAP uses more granularity in these categories than many of the previous models, the authors note. The model divides patients into nine stages of non-metastatic prostate cancer based on their point score from stage 1 to stage 3, with each stage split into sub stages of A, B and C. Men diagnosed with localized low-to-intermediate risk prostate cancer and with a significant life expectancy are usually offered the choice of two broad therapeutic options, either active treatment with surgery or irradiation with high risk of side effects. Using its localizing strength, MRI has increased opportunities in management of prostate cancer. Additionally, MR thermometry allows real time, peri-procedural monitoring to ensure selective and adequate tumor ablation. Focal therapy (FT) for prostate cancer (PCa) reduces functional complications with promising oncological results. Magnetic resonance image (MRI)-guided Focal Laser Ablation (MRgFLA) potentially maximizes precision.

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Received: October 07, 2020; **Accepted**: October 21, 2020; **Published**: October 28, 2020

Citation: Asif AR (2020) Prostate Cancer: An Overview. J Clin Cell Immunol. 11:606.