

Beta Blockers may have Anticancer Properties



According a new study published in Cancer, certain drugs taken to improve heart health may have anticancer properties.

Stress hormones are believed to stimulate cancer to grow and spread. Beta blockers, commonly used for hypertension and other heart-related conditions, are believed to affect the body's stress response and thus have an impact on cancer progression.

In order to evaluate the potential of beta blockers to prolong cancer patients' survival, a study was conducted by Anil Sood, MD, of The University of Texas MD Anderson Cancer Center and his team. They analysed the 2000 to 2010 medical records of 1425 women who were treated at several different medical centers for ovarian cancer. 193 women were taking beta-1 adrenergic receptor (ADRB1) selective agents and 76 were receiving nonselective beta antagonists.

"We found that patients taking a broad, or nonselective, beta blocker were the ones who derived the most benefit compared with those who were not taking a beta blocker or those who were taking a beta-1-selective medication," said Dr. Sood.

The findings also show that the median survival time for patients using any beta blockers was 47.8 months as compared to 42 months for non-users. The median survival time for those using nonselective beta blockers was 94.9 months as compared to 38 months for those using ADRB1 selective agents. Patients with hypertension had shorter survival times as compared to those without hypertension. However, in patients with hypertension, users of nonselective beta blockers had a longer median survival time.

Dr. Sood points out that this is the first study to examine the relationship between specific types of beta blockers and patient outcomes.

In an accompanying editorial, Kristen Bunch, DO, of the Walter Reed National Military Medical Center, and Christina Annunziata, MD, PhD, of the National Cancer Institute, highlight that the investigators of the current study have uncovered a dramatic survival advantage that warrants further analysis. They point out that this study has now laid the groundwork for an investigation into repurposing cardiovascular medications to cancer therapeutics. However, they caution that beta blockers can have side effects that could prevent the widespread use of these drugs in cancer patients.

Source: Wiley

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