

Cancer-Related Treatments and Cardiovascular Disease Risk



A study using clinical trial data has identified a higher risk of stroke, heart attack, and hospitalisations for heart failure among older cancer survivors. Published in Cancer, the analysis also linked chemotherapy to increased rates of these cardiovascular conditions.

While advancements in cancer treatments have reduced mortality rates over the past decade, the growing population of cancer survivors may face long-term effects from cancer and its treatments. The heart is particularly vulnerable to inflammation caused by cancer and the toxic effects of chemotherapy and radiation.

To explore the incidence of cardiovascular disease in older cancer survivors and how specific cancer treatments impact heart health, a research team from Monash University analysed data from the ASPirin in Reducing Events in the Elderly (ASPREE) trial. This trial involved adults aged 70 and older from Australia and the United States.

Previous studies have noted an increased risk of cerebrovascular diseases, such as stroke and heart attacks, following cancer treatment. However, this study is the first to examine how different treatment modalities affect various cancer types and the role of aspirin in influencing rates of these cardiovascular events.

Among the 15,454 participants, 1,392 developed cancer over an average follow-up of 4.6 years. The researchers found that cancer survivors experienced twice the rate of cardiovascular disease events—such as stroke, heart attack, or hospitalisation for heart failure—compared to those without cancer, with rates of 20.8 vs. 10.3 events per 1,000 person-years. This elevated risk persisted even after adjusting for traditional cardiovascular risk factors.

The highest incidence of cardiovascular events was seen in patients with metastatic, blood, and lung cancers. Chemotherapy was linked to a two-fold increase in cardiovascular disease events, while the impact of other systemic therapies—such as hormonal, targeted, immunotherapy, and radiation—was inconclusive, though thoracic radiation is known to increase risk. Aspirin, the trial's intervention, did not affect cardiovascular event rates.

Study authors emphasise the importance of early cardiovascular screening and preventive measures for cancer survivors. This research adds to the growing evidence that cancer- and treatment-related cardiovascular disease is a significant risk for cancer survivors. Cardiovascular disease can greatly affect both the quality of life and survival of cancer patients. Fortunately, early screening and prevention can help mitigate some of these risks.

Source: Cancer Image Credit: iStock

Published on: Mon, 30 Sep 2024