Geriatrics experts explore relationship between the two leading causes of death for older Americans
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Experts' discussions and recommendations addressing the interface between cancer and heart disease were published this month in the Journal of the American Geriatrics Society summarizing sessions from a virtual bench to bedside conference hosted by the American Society of Geriatrics (AGS).

The interrelationship between these two conditions—the two leading causes of death for older Americans—is critical to being able to effectively treat patients with either cancer, cardiovascular disease (CVD) or both concurrently, as risk factors for CVD are also risks for cancer, and both conditions often co-exist in older adults. Many cancer patients have underlying CVD, cancer treatments can increase the risk of CVD, and risk factors can exacerbate each other. Although significant advances in early detection and combination treatments have improved cancer survival rates, the management of care after cancer treatment in older adults has not changed much in twenty years. Clinicians and healthcare professionals across disciplines face the challenge of delivering patient-centered, high-quality care for older adults with either or both cancer and CVD while mitigating unnecessary risk of morbidity or mortality of the other.

"This AGS-NIA 'U13' conference has stimulated new research collaborations between patients, geriatricians, oncologists, and cardiologists who are tackling common yet unsolved clinically important issues at the interface of aging, cancer, and cardiovascular disease," Surpiya Mohile, MD, MS, conference co-chair said. "New collaborations and a working group have been formed to move what has been learned at the conference to towards next steps."

More than 80 experts and new investigators—leaders and rising stars—in various disciplines in the field of aging were invited to come together virtually in sessions addressing mechanisms of co-development of CVD and cancer, the cardiotoxic effect of cancer therapies and management of patients with both cancer and CVD. Conference attendees shared updates on the latest research developments, identified specific gaps in knowledge, and created opportunities for collaboration with the aim of finding better and more equitable management strategies.

One promising study is Targeting Aging with Metformin (TAME), a trial tracking more than 3,000 individuals aged 65-79 to determine whether metformin can delay the development or progression of many age-related chronic diseases, including CVD and cancer. In clinical trials metformin has been linked to lower CVD and cancer mortality rates, providing insight into the aging processes affecting cancer and CVD and the...
possibility of using existing drugs to delay aging.

Cardiotoxicity from cancer treatment is the most common cause of CVD in cancer survivors, leading to different kinds of cardiac complications depending on how the cancer treatment affects biological mechanisms. For instance, most cytotoxic chemotherapies induce senescence—the process by which damaged cells permanently exit the cell cycle—in tumor cells. Therefore, therapies that target cellular senescence might prevent cardiotoxicity in patients undergoing cancer treatment. Some drugs that treat systolic heart failure might also prevent cardiotoxicity. Understanding the unique underlying mechanisms through more research is a top priority in cardio-oncology.

Older adults tend to question treatments and even patients who respond well to cancer treatment face the specter of recurrence as patients with CVD fear heart attacks and stroke, a situation made worse by a lack of coordination between cardiology and oncology. Until a comprehensive geriatric assessment is the standard for evaluation and follow up, patients, families, and caregivers face the repercussions of a siloed approach in care management that creates misperceptions about risk and often delays care. Shared decision-making that considers patient values and preferences facilitates an open discussion between clinicians and patients about the best available evidence and treatment choices that protect quality of life. Using accessible and appropriate language and shared decision-making tools help communicate and accurately interpret risk levels.

Improved collaboration fosters a preventive medicine approach. Although there is still a lot to be learned about the complexity of managing comorbid CVD and cancer, they share many risk factors that can be mitigated by lifestyle changes such as physical activity, diet, and environmental exposures. Physical activity interventions, for instance, could prevent the progression or new onset of both diseases.

At the same time, these challenges are further complicated by health disparities associated with both cancer and CVD among racial and ethnic minority populations as well as individuals of lower socioeconomic status, people who live in specific locations such as rural areas, and LGBTQ+ communities. Presenters at the conference discussed approaches to ensure equitable access to clinical trials and healthcare for all older adults. And while research priorities are still being identified, so are the reasons why limited numbers of people from racial and ethnic minorities participate and why clinical cancer trials often exclude older adults even though they benefit most from resulting treatments.

The AGS-NIA U13 conference on Cancer and Cardiovascular Disease was the third and final in a three-part series designed to provide updates on cutting-edge research and facilitate collaboration among experts. Editorials summarizing this and the previous two conferences are both available for free from JAGS.

"The NIA/AGS conference series has been instrumental in defining research priorities and actionable next steps most likely to move the needle toward better health outcomes for older Americans, said Heather Whitson, Md, MHS, principal investigator for the conference series. "We are delighted that this tradition will continue with our next series, which will focus on the research agenda for resilience across the lifespan."


Provided by American Geriatrics Society