Prior Cancers Are Common in Patients Newly Diagnosed With Cancer

January 2, 2018 By National Cancer Institute

Between 2009 and 2013, almost 20 percent of patients newly diagnosed with a primary cancer had been diagnosed with one or more cancers in the past, according to a new study.

These large numbers have implications for cancer screening and survivorship care, given that a prior and current cancer in a given patient may share risk factors, such as human papillomavirus (HPV) infection or tobacco use, explained Nancy Davidson, MD, of the Fred Hutchinson Cancer Research Center, in an editorial that accompanied the paper.

And some types of second primary cancer—such as leukemia—can be related to chemotherapy or radiation therapy used to treat a prior cancer, so clinicians caring for cancer survivors should be aware of these links, wrote the study authors.

The study results also may cause reconsideration of entry criteria for clinical trials, said the study's lead author, Caitlin Murphy, PhD, MPH., of the University of Texas Southwestern Medical Center in Dallas. Traditionally, she explained, many trials exclude patients with a prior cancer.

"But due to advances in treatment, cancer survivors are living longer and have better outcomes, and exclusion criteria for trials haven't kept up with that progress," Murphy added.

Potential Hazards of Excluding Cancer Survivors from Clinical Trials

The University of Texas Southwestern researchers pulled data from NCI's Surveillance, Epidemiology, and End Results cancer registries for 740,990 persons newly diagnosed with cancer between January 2009 through December 2013.

Overall, they found that 18.4 percent of newly diagnosed patients had a prior history of cancer. When the team broke down their findings by age, 25.2 percent of patients aged 65 or older had a prior history of cancer, as did 11 percent of younger adults.

For some types of newly diagnosed cancer, the percentage of patients with a previous cancer diagnosis was especially high. For example, among patients newly diagnosed with leukemia, almost a quarter of those under age 65, and about 37 percent of those 65 and older, had

previously been treated for another cancer.

Considering these large numbers, excluding patients with a prior cancer has the potential to hamper enrollment for trials of rarer cancers, particularly cancer types that tend to occur in older adults, wrote the study authors.

Also, explained Murphy, when trials exclude all people with prior cancers, the trials' results cannot necessarily be generalized to that group of patients, who are far more numerous than previously realized.

"Right now, what comes out of trials doesn't [necessarily] apply to a substantial proportion of the population," she said.

The Future of Clinical Trial Enrollment

The cancer research community has begun to recognize the limitations of older, restrictive exclusion criteria for clinical trials. As a result, researchers have begun to examine how to include patients from many population groups that have traditionally been excluded from trials while still ensuring their safety, explained S. Percy Ivy, M.D., program director of NCI's Experimental Therapeutics Clinical Trials Network.

For example, NCI and others have shown that it may be safe to include patients with well-managed HIV infection—many of whom are living well into older age—in immunotherapy trials.

In November, the American Society of Clinical Oncology and several partners published a series of articles examining how some people belonging to traditionally excluded groups might safely participate in trials. These included patients with other illnesses or organ dysfunction, patients with a history of prior cancer, and patients with brain metastases from a current cancer.

"There is definitely a lot of room for inclusion criteria to be expanded," she said.

Other research from the University of Texas Southwestern group has shown that survival among patients with locally advanced lung cancer does not differ between those who have or have not had a prior cancer.

The team is currently examining the same question for patients with breast, colorectal, pancreatic, and kidney cancer and non-Hodgkin lymphoma, Murphy said. Their goal, she continued, is to expand the conversation "about reconsidering how we include [specific] patients in trials."

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