

A couple topics of discussion from the sharing session at the January 6, 2018 PCSANM meeting, one on Cancer Striking twice, and specifically after Prostate Cancer

## **When Cancer Strikes Twice**

**Jane E. Brody    December 25, 2017    [www.NYTimes.com](http://www.NYTimes.com)**

Cancer can, and sometimes does, strike twice. It famously happened to Justice Ruth Bader Ginsburg of the Supreme Court, who was successfully treated for colon cancer in 1999 and then for pancreatic cancer in 2011. If not for the regular checkups she underwent after colon cancer, it is quite likely that her pancreatic cancer, which is rarely found early, would not have been detected while still curable.

Depending on age, up to one in four cancer survivors is likely, sooner or later, to develop a second new cancer that is neither a recurrence nor spread of the original. Yet many survivors fail to take advantage of well-established ways to keep a future cancer at bay or take steps to detect a new cancer when it is still early enough for cure.

The matter is hardly trivial. The population at risk is huge and growing. As a result of better cancer screening and treatment and continuous aging of the population, the number of cancer survivors in the United States has increased fourfold in the last 30 years, reaching 15.5 million by 2016, and is expected to climb to 26.1 million by 2040.

Though it may seem counterintuitive, patients successfully treated for early breast or lung cancer are likely to live longer than people who never had cancer, giving them more years in which to develop a second cancer.

In a recent report in JAMA Oncology by researchers at the University of Texas Southwestern Medical Center in Dallas, approximately 25 percent of Americans 65 and older and 11 percent of younger adults who were previously treated for cancer were subsequently found to have one or more new cancers in a different site.

Depending on the type of original cancer and the person's age, the risk of developing a second unrelated cancer ranged from 3.5 percent to 36.9 percent. The study covered 765,843 new cancer diagnoses made between 2009 and 2013 and recorded in a population-based national registry, the Surveillance, Epidemiology and End Results (SEER) program.

In many cases, the development of a second cancer resulted from the same risk factors that most likely precipitated the first malignancy. These factors include tobacco use, obesity and infection with human papillomavirus (HPV). For example, a smoker who has been successfully treated for lung cancer may later develop bladder cancer, which is also related to smoking, as well as a second lung cancer. An HPV infection, which most often causes cervical cancer, can also cause cancers of the vagina, penis, rectum and throat. And obesity is a known risk factor for at least 13 kinds of cancer, including cancers of the uterus, esophagus, stomach, liver, kidney, colon and pancreas.

Although much less common nowadays than in years past, sometimes the chemotherapy or radiation treatments used to control the first cancer cause genetic or other changes that lead to a new cancer. Examples include leukemia that can be induced by chemotherapy or radiation therapy, or uterine cancer caused by the drug tamoxifen used to treat breast cancer.

The Texas researchers, led by Caitlin C. Murphy, an epidemiologist, undertook the study of new cancers in cancer survivors in hopes of changing the common practice of excluding former cancer patients from clinical trials when they develop another cancer.

"This exclusion is not evidence-based," Dr. Murphy said in an interview. "Patients with a prior cancer do not necessarily have a worse prognosis than those without a cancer history. They should be allowed to participate in clinical trials, which may be one of their only treatment options. If they're excluded, a lot of patients are left out from what may be the best available treatment."

Dr. David E. Gerber, a co-author and lung cancer researcher, said another message from the study was the importance of urging patients to eliminate or reduce cancer risk factors and pursue surveillance recommendations that can alert doctors to the development of a new cancer early enough for cure.

Based on his research, Dr. Gerber said that “among people found to have a Stage 4 lung cancer, 15 percent of them had a history of an earlier cancer.” Had they been counseled about their risk of developing a new cancer and properly monitored, they most likely would not have had such advanced disease, which is rarely curable. And if they had quit smoking after the first diagnosis, their risk of developing a new lung cancer could have fallen by almost 90 percent, he said.

Dr. Nancy E. Davidson, who wrote an accompanying commentary, said there were evidence-based guidelines for monitoring cancer survivors who had been treated for cancers of the breast, lung and colon.

“Just because you were successfully treated for one cancer doesn’t mean you’re not at risk for another cancer,” Dr. Davidson, of the Fred Hutchinson Cancer Research Center in Seattle,

said in an interview. “There are appropriate surveillance guidelines for cancer survivors based on their age and previous diagnosis. Interventions should be tailored to the patient’s circumstances so that patients are spared unnecessary testing.”

She also emphasized the importance of counseling cancer survivors about caring for their general health. “When patients survive cancer, it doesn’t mean they won’t get heart disease, high blood pressure or diabetes,” she said.

In a previous study of 42 survivors of early-stage breast and prostate cancers, Shawna V. Hudson, medical sociologist at the Cancer Institute of New Jersey, and co-authors wrote in the *Annals of Family Medicine* that about “70 percent of cancer survivors have co-morbid conditions that require a comprehensive approach to their medical care. Survivors’ follow-up management entails more than routine surveillance for recurrence of cancer.”

After five years of survival, only about a third of cancer survivors continue to be cared for by specialists related to their original cancer, researchers at the Centers for Disease Control and Prevention have found.

Too often, Dr. Hudson’s team wrote, once they finish cancer treatment and its immediate aftermath, survivors fail to receive appropriate care from their primary care doctors. They said patients needed “a better understanding of what cancer follow-up care is, its lifelong duration, and the potential for varying degrees of monitoring.” Many of the participants in their study “were unaware that cancer follow-up care extends beyond surveillance for recurrence.”

## Second Cancers After Prostate Cancer

from <https://www.cancer.org/cancer/prostate-cancer/after-treatment/second-cancers.html>

Cancer survivors can be affected by a number of health problems, but often a major concern is facing cancer again. If a cancer comes back after treatment it is called a recurrence. But some cancer survivors may develop a new, unrelated cancer later. This is called a second cancer.

Unfortunately, being treated for prostate cancer doesn’t mean you can’t get another cancer. Men who have had prostate cancer can still get the same types of cancers that other men get. In fact, they might be at higher risk for certain types of cancer.

Men who have had prostate cancer can get any type of second cancer, but they have an increased risk of certain cancers, including:

- Small intestine cancer
- Soft tissue cancer
- Bladder cancer
- Thyroid cancer
- Thymus cancer

- Melanoma of the skin

Men who are treated with radiation therapy also have a higher risk of:

- Rectal cancer
- Acute myeloid leukemia (AML)

This risk is probably related to the dose of radiation. Newer methods of giving radiation therapy may have different effects on the risks of a second cancer. Because these methods are newer, the long-term effects have not been studied as well.

### **Follow-up after prostate cancer treatment**

After completing treatment for prostate cancer, you should still see your doctors regularly. Let them know about any new symptoms or problems, because they could be caused by the cancer coming back or by a new disease or second cancer.

Prostate cancer survivors should also follow the American Cancer Society guidelines for the early detection of cancer, such as those for colorectal and lung cancer. Most experts don't recommend any other testing to look for second cancers unless you have symptoms.

### **Can I lower my risk of getting a second cancer?**

There are steps you can take to lower your risk and stay as healthy as possible. For example, prostate cancer survivors should do their best to stay away from all tobacco products and tobacco smoke. Smoking can increase the risk of bladder cancer after prostate radiation, as well as increase the risk of many other cancers.

To help maintain good health, prostate cancer survivors should also:

- Get to and stay at a healthy weight
- Stay physically active
- Eat a healthy diet, with an emphasis on plant foods
- Limit alcohol to no more than 2 drinks per day

These steps may also lower the risk of some other health problems.