

**COVER STORY**



# CARING FOR CANCER SURVIVORS

As more patients survive, hospitalists need to recognize and manage late effects of treatment

*By Janet Colwell*

Shortness of breath can be a sign of heart failure, but it's usually not high on the list of possible diagnoses when the patient admitted is a 35-year-old woman. However, it becomes much more likely if the woman was once treated with doxorubicin for breast cancer.

"Often we're so busy asking them about diabetes, or whether they have ever had a heart attack or uncontrolled hypertension, that we don't think about past cancer treatments," said Vandana Y. Bhide, MD, FACP, a hospitalist and associate program director of the internal medicine residency at Mayo Clinic in Jacksonville, Fla. "But sometimes the first detection of either a person's recurrence or long-term effects of a treatment is found when someone is admitted to the hospital."

Survivorship care is becoming more important for hospitalists as detection and treatment methods improve and more people survive cancer. However, most hospitalists receive little or no training in recognizing the potential late effects of common cancer therapies and how they can impact treatment decisions during hospitalization.

According to the National Cancer Institute, the 5-year survival rate for all types of cancer has been steadily rising from 50% for patients diagnosed in 1976 to 67% for patients diagnosed in 2003. That good news comes with the caveat that adult survivors, particularly of childhood cancers, are often at much higher risk than non-survivors for developing severe or life-threatening health problems that could require hospitalization.

"People are surviving cancer, and we need to be able to handle and anticipate their late effects," said Carol A. Rosenberg, MD, FACP, director of Preventive Health Initiatives and director of the Living in the Future (LIFE) Cancer Survivorship Program at NorthShore University Health System, a 4-hospital system in the northern suburbs of Chicago. "We've had miracle cures for childhood cancers, but we don't know how to handle the late effects 20 years down the line now that those patients are adults."

## GETTING A TREATMENT HISTORY

One of the most important tools needed to care for adult cancer survivors is a summary of their past treatment, according to physicians surveyed for a study in the Jan. 7 *Annals of Internal Medicine*.

Ideally, a patient's oncology team creates a survivorship care plan including the patient's diagnosis and treatment, potential late effects, and recommendations for long-term surveillance, as recommended by the Institute of Medicine in its 2006 report, "From Cancer Patient to Cancer Survivor: Lost in Transition." The Commission on Cancer subsequently mandated that all accredited cancer centers provide patients with survivorship care plans by 2015.

However, such plans require considerable staff time and are rarely completed in community-based practices, where most patients receive care. According to the *Annals* report, fewer than 20% of adult childhood cancer survivors say they have received survivor-focused care or a treatment summary, leaving hospitalists to piece together a clinical history when survivors are admitted.

"We can never assume there is a care plan," said Amy E. Boutwell, MD, MPP, a hospitalist at Newton-Wellesley Hospital in Newton, Mass., and founder of the consulting firm Collaborative Healthcare Strategies, which focuses on improving care transitions. "It's an aspirational concept now; it doesn't live robustly in everyday medical practice."

In the absence of a care plan, it's essential to take a thorough clinical history, said Emily S. Tonorezos, MD, MPH, ACP Member, a general internist at Memorial Sloan Kettering Cancer Center's adult long-term follow-up program in New York, which follows survivors who had high-risk treatment, such as chest radiation.

Patients often remember whether or not they received the chemotherapy drug doxorubicin, for example, because of its vivid red color and because they were told that the treatment increased their risk of heart failure, she said. "These are things that a hospitalist can figure out by asking patients the right questions."

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Hospitalists who aren't used to thinking about cancer issues may record a history of Hodgkin lymphoma 10 or 20 years ago, for example, but don't probe deeper, said Larissa Nekhlyudov, MD, MPH, ACP Member, director of cancer research and associate professor of population medicine at Harvard Medical School in Boston. But knowing a patient had cancer should prompt further questions, such as whether or not they had surgery, chemotherapy, radiation, or a bone marrow transplant.

"If medical records are not available, ask patients whether they know what type of chemotherapy they had or what parts of their body were radiated," she said. "Even that basic knowledge can help the hospitalist figure out whether a patient's presenting symptoms may be the result of any of their prior treatments."

Information from the patient, along with some basic knowledge of cancer treatments, can help you piece together a history, said Dr. Bhide. For example, if a patient had breast cancer, ask if she was pre- or post-menopausal at the time of treatment. The former suggests cytotoxic chemotherapy whereas a post-menopausal patient with early-stage disease may not have required chemotherapy. Furthermore, the type of anti-hormonal treatment depends on hormone receptor status and menopausal status of the patient.

## COVER STORY

After talking to the patient about her history, try to retrieve any past medical records that detail prior surgical and treatment history, recommended Jeffrey Metts, MD, MPH, chief of medicine at Cancer Treatment Centers of America, Southeastern Regional Medical Center in Newnan, Ga. "It's rare that we encounter an outside care plan for a patient coming through here, but an outstanding office note can really help us evaluate our patients," he said.

## IMPACT ON TREATMENT

Knowing the details of a patient's treatment history—either through a care plan or interviewing the patient and collecting past records—can affect both diagnosis and treatment.

Hospitalists should be as familiar with common late effects of cancer therapies as they are with treatments for other common diseases, said Dr. Rosenberg.

"If a patient comes into the hospital comatose with a history of diabetes, you immediately think too much insulin," she said. "Similarly if a 45-year-old woman comes in with congestive heart failure and a history of breast cancer, you need to think about cardiotoxic drugs."

In non-cancer patients, an elevated white blood cell count might be assumed to result from infection or inflammation. "With a cancer patient, we have to consider that they might have gotten a colony-stimulating factor to counteract a chemotherapy treatment that's known to drop the white blood

cell count, or maybe they've gotten steroids recently for low platelets," said Dr. Metts.

Treatment options may also depend on past cancer, as with a woman with a history of cervical and thyroid cancer, recently admitted by Norman Brito-Dellan, MD, a hospitalist at the University of Texas MD Anderson Cancer Center in Houston. She was suffering from back pain related to destructive lesions in her lumbar spine, which turned out to be malignant.

"Ideally we would offer radiation therapy but she has received radiation before and that's not a possibility for her, so we're managing her pain with medications," said Dr. Brito-Dellan. "That's a typical scenario for us when treating cancer survivors."

Past chemotherapy or radiation treatment may have left a patient with damage to the lungs, kidney or liver; hearing loss; or digestive problems, such as nausea or diarrhea. While patients may be able to tell hospitalists about some of these issues, they may not be aware of certain side effects, such as renal insufficiency, Dr. Boutwell said. But that information may directly impact the hospitalist's management plan.

"It's very important to the admitting hospitalist to have that information because she might be considering strong medications that could affect the kidney or running tests using dyes that are processed by the kidney," said Dr. Boutwell. "We need to understand the patient's treatment history and any side effects they've had."

Hospitalists should also remember to consider cancer treatment effects when young adults present with surprising or atypical symptoms, said Steven C. Martin, MD, FACP, chief of the general internal medicine service at Memorial Sloan Kettering.

"When you're aware that they had chemotherapy or radiation, your working hypothesis about what made them sick will change," he said. For example, a young adult survivor admitted for shortness of breath who has received past radiation treatment may have pulmonary fibrosis.

Such side effects can manifest years after initial treatment. "Knowing that they have these risk factors for significant underlying pulmonary disease as a late effect of their treatment is useful in evaluating and managing them," said Dr. Martin. "These patients finish with their oncologist and are considered cured, but 10 to 15 years later they get admitted to the hospital, and someone needs to realize that it's important that they had cancer and that it may influence the differential diagnosis and treatment."

Hospitalists also have to be aware of potential recurrence or secondary cancers due to the effects of radiation or chemotherapy, said Dr. Bhide. Some patients are also genetically predisposed to secondary cancers, such as someone who had colon cancer and has the inherited disorder Lynch syndrome, which puts her at higher risk for endometrial and other cancers.

Survivors can also develop serious illnesses that are related to their past cancer but not directly to treatment side effects, said Dr. Tonorezos. For example, an adult survivor of childhood leukemia was recently admitted to Memorial Sloan Kettering for varicella. Due to a bone marrow transplant as a child, he was ineligible for the varicella live vaccine.

"When he was exposed to varicella, he needed hospitalization and was very sick for a while," she said. "These patients are at such high risk for medical problems that hospital care is a very big part of taking care of them."

## ELEMENTS OF THE SURVIVORSHIP CARE PLAN

The Institute of Medicine (IOM) recommended that all cancer patients receive a survivorship care plan summarizing their diagnosis and treatment, potential late effects, and recommendations for long-term care. According to the IOM, a good plan should contain the following elements:

- diagnostic tests performed and results;
- tumor characteristics (e.g., site, stage and grade, hormonal status, marker information);
- dates of treatment initiation and completion;
- surgery, chemotherapy, radiotherapy, transplant, hormonal therapy, gene, or other therapies provided, including agents used, treatment regimen, total dosage, identifying number and title of clinical trials, indicators of treatment response, and toxicities experienced during treatment;
- psychosocial, nutritional, and other supportive services provided;
- full contact information of treating institutions and key individual clinicians; and
- identification of a key point of contact and coordinator of continuing care.

## PHYSICIAN EDUCATION

Given the important role of primary care physicians and hospitalists in caring for cancer survivors, some medical schools and teaching hospitals are incorporating survivorship training into their curriculum. For example, this school year, Northwestern University's Feinberg School of Medicine in Chicago introduced cancer survivorship into its course sequence for medical students, said Sheetal M. Kircher, MD, assistant professor of medicine at Northwestern and medical director of the Cancer Survivorship Institute at affiliated Northwestern Memorial Hospital.

"No matter what field of medicine we go into, we will encounter cancer survivors and every physician needs to have some basic knowledge about issues specific to this population," said Dr. Kircher. Northwestern's internal medicine residents also take survivorship lectures as part of their oncology rotations.

Dr. Rosenberg, also a clinical associate professor of medicine for the University of Chicago Pritzker School of Medicine, launched NorthShore Kellogg Cancer Center's LIFE survivorship health professional education program in response to statistics suggesting that very few primary care physicians understand common late effects of treatment. In a national survey of practicing U.S. physicians published in the *Journal of General Internal Medicine* in 2011, less than half of primary care physicians felt knowledgeable about testing for recurrence or caring for psychosocial effects of cancer, and only 23% reported feeling confident about caring for the late physical effects of cancer or its treatments.

"We need to improve the core competency of providers because physicians in existing practice don't know what to do and we're not teaching it in medical school," said Dr. Rosenberg. "People are surviving and we need to be able to handle and anticipate their late effects."

With the help of a 3-year grant from the Coleman Foundation, Dr. Rosenberg created a 4-hour workshop and accompanying manual that focuses on teaching resident physicians and practicing clinicians alike to anticipate and understand late effects of treatment for the most common types of cancer, including breast, prostate, and colon cancer and acute leukemias. Participants also receive a reference manual on common late effects and learn how to put together a care plan for patients who never received one after their treatment.

"I teach them how, in a few simple steps, they can create a survivorship care plan that would make sense for the care a patient needs now," she said. "That plan will be particularly useful to a hospitalist because they may be seeing this patient at a time remote from treatment and will want to know if a problem is a manifestation of late effects or part of a comorbidity."

Hospitalists who teach residents or medical students can play an important role in educating about last effects, said Dr. Nekhlyudov, who created an online repository of cancer survivorship resources for primary care clinicians at [www.cancerpcp.org](http://www.cancerpcp.org).

"Many hospitalized patients that we see have a history of cancer," she said. "As those patients are being reviewed during rounds, we should look at their cancer history as an educational opportunity for the medical team, not just something in the history that's gone and forgotten." ■

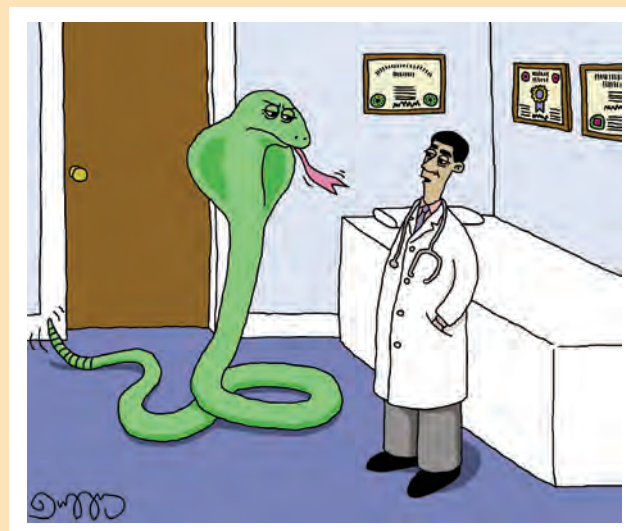
*Janet Colwell is a freelance writer in Brooklyn, N.Y.*

## CARTOON CAPTION CONTEST: PUT WORDS IN OUR MOUTH

*ACP HospitalistWeekly* and *ACP InternistWeekly* have compiled the results from their latest cartoon contest, where readers are invited to match wits against their peers to provide the most original and amusing caption.

This issue's winning cartoon caption was submitted by John A. Tenini, MD, ACP Resident/Fellow Member. Thanks to all who voted! The winning entry captured 61.8% of the votes.

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