Sample Expert
Second Opinion

Chronic Lymphocytic Leukemia
ABOUT DR. ANN LACASCE

Ann LaCasce, MD is a lymphoma specialist at Dana-Farber Cancer Institute in Boston. Her research focuses on the development of clinical trials using novel agents in non-Hodgkin’s and Hodgkin’s lymphoma. She is a member of the Alliance Lymphoma Core Committee which develops and executes clinical trials on a national level.

EDUCATION

Medical School: Tufts University School of Medicine
Residency: Brigham and Women’s Hospital
Fellowship: Dana-Farber/Partners Cancer Care

CERTIFICATIONS AND AWARDS

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SUMMARY FOR THE PATIENT

Thank you for allowing me to review your case and provide my opinion. Before answering your questions and offering my recommendations, let me summarize the relevant medical history and concerns based on what I have learned from the medical records and the questions that were asked. In providing the remainder of my consultative opinion, in an attempt to provide a document that you can easily share with your patient, I will respond as if I were discussing the case directly with your patient.

You are 66 years old and were recently diagnosed with chronic lymphocytic leukemia, or CLL. The diagnosis was made after your primary care physician performed some routine blood tests and discovered that your white blood cell count was elevated. You have consulted with an oncologist who does not believe that treatment is indicated at this point in time and has advised a “watch and wait” approach, with regular visits and testing every two months. You currently feel well but would very much like another opinion on this approach.

BACKGROUND

Before I respond to your specific questions, I’d like to provide you with a bit of background information about chronic lymphocytic leukemia, or CLL. Although you may be familiar with some of what I’m going to tell you, I feel that the information will be helpful in better understanding the recommendations that I make.

Chronic lymphocytic leukemia (or CLL) refers to cancer that involves white blood cells called lymphocytes, the cells which normally help one to fight off infections. CLL arises from B-cell lymphocytes which originate in the bone marrow, the place in the body where blood cells are produced. These abnormal white blood cells divide and accumulate more rapidly than they should. As CLL progresses, the leukemia cells begin to crowd out the normal cells in the bone marrow, including the red blood cells (cells that transport oxygen from the lungs to other parts of the body) and platelets (cells that function to stop bleeding); anemia and easy bruising or bleeding often result. These cells typically spill over into the bloodstream and frequently spread to the lymph nodes, liver and spleen, causing them to become enlarged.

A cancer’s ‘stage’ describes how much cancer is present within the body. CLL is staged based on patients’ blood counts (i.e. how many red blood cells, white blood cells, and platelets they have) and whether or not the liver, spleen and lymph nodes are enlarged. Because CLL tends to grow slowly, patients with early stage disease are typically not treated right away. Instead, they are carefully monitored, and treatment is only initiated if and when their disease progresses. Although CLL is not cured with standard chemotherapy, there are therapies to help control it. In fact, many patients with the disease go decades without experiencing significant symptoms or a deterioration in their overall health. While there are approximately 18,000 cases of CLL diagnosed each year in the United States, because patients typically live for many years, there are more than 125,000 patients in the country living with the disease.

Now, on to your questions.
PATIENT'S QUESTIONS

What causes CLL? Is there anything in my case that you think caused it?

The cause of CLL is not well understood. It is clearly not related to any lifestyle risk factors and there is nothing you did which contributed to the development of the disease. There may be some environmental factors, such as herbicides and pesticides, that increase the risk of CLL. Also, rarely, multiple cases of chronic lymphocytic leukemia (CLL) or related lymphomas are present in a family. We do not, however, recommend that patient's family members be screened for lymphoma, given the very low likelihood that they will have the disease.

Are we taking the right approach by just monitoring this? Can you explain why we are not treating this with chemotherapy now?

Yes, active surveillance—a term I much prefer to watch and wait—is the widely agreed upon initial approach to patients with chronic lymphocytic leukemia (CLL) who are not experiencing symptoms and do not have a large burden of disease. While we have many very effective treatments for the disease, early treatment has never been shown to lengthen life expectancy in patients with CLL. In fact, there is good evidence to suggest that there is a disadvantage to treating patients too soon, as this may lead to the development of disease which is more difficult to treat in the future.

It's important to keep in mind that CLL is a disease which is not cured with standard chemotherapy, as some of the tumor cells survive treatment and reappear later. Therefore, you are not missing a chance to destroy the disease completely by treating it early.

While taking the “watch and wait” approach, what are we waiting for? What is my doctor looking for that might indicate I need treatment of some kind?

Patients are not treated based on how high their white blood cell (WBC) count rises, but rather on the bone marrow’s ability to continue to make the other normal blood cells, such as red blood cells and platelets. Indications for treatment include a low red blood cell or platelet count, enlarged lymph nodes or a big spleen, and the presence of symptoms. Treatment is also indicated in the rare event that the disease transitions to a fast growing lymphoma.

Patients are typically followed every two to three months for the first year or two after diagnosis, and then, if their disease is stable, appointments can be spread out. Visits consist of taking a history to ask about any symptoms, examining the lymph nodes and spleen, and checking blood counts. We also recommend that all patients have annual skin checks to watch carefully for any skin cancers (basal cell or squamous cell), as these are more common in patients with CLL. Finally, patients should receive a pneumonia vaccine and a flu vaccine yearly and have their vitamin D levels checked, as patients with adequate vitamin D levels tend to do better than those who are deficient.
What physical signs and symptoms should I be looking for that, if they occur, I should let my doctor know about?

Symptoms to look for and alert your physician about include fevers, night sweats, or unexplained weight loss. All of these are rare, particularly in early stage CLL, but, should they appear, could be a sign of progressive disease or the transformation to a fast growing lymphoma. If the lymph nodes in your neck, armpits or groin appear to be growing, you should also let your doctor know. In addition, if you have other unusual or persistent symptoms (such as cough or abdominal pain), please alert your doctor.

Is there any way of telling if (and how quickly) the disease will advance?

There are a number of prognostic factors which can help provide an indication of how quickly the disease may progress or how it may respond to treatment. Among other things, these include the chromosome pattern in the leukemia cells, known as cytogenetics, as well as the presence or absence of mutations of the heavy chain genes (the heavy chain genes code for special proteins produced by lymphocytes) and the level of a protein called beta-2 microglobulin levels in the blood.

Are there any lifestyle changes that you would recommend to help optimize my health and potentially slow the progression of the disease?

We recommend patients eat a healthy diet and stay active for general good health—not because this changes the progression of the disease. You may receive a lot of advice regarding supplements and herbal medications, but with the exception of vitamin D supplementation if your levels are low, we do not recommend them.

Are there clinical trials going on that I might be qualify for? Would you recommend this? Could they help me?

A number of ongoing trials are attempting to learn more about CLL by collecting information about patients with CLL along with blood and/or tissue samples. These types of databases have been very important in the development of a number of new, highly effective drugs for chronic lymphocytic leukemia (CLL), including the oral medications ibrutinib, idelalisib and venetoclax. Participating will not directly benefit you, but it could help lead to new discoveries.

At the time you need treatment (which could be months to many years from now), I would strongly recommend that you seek out an opinion from a specialized cancer center to see if there are any available trials which might be good options for you, particularly given how quickly this field has changed in the last 10 years.
SUMMARY OF NEXT STEPS

Thank you, PATIENT NAME, for allowing me to participate in your care. In summary:

1. I agree with the plan for active surveillance.
2. Talk to your doctor about prognostic testing. This may give you an indication of how quickly the disease will progress or how it might respond to future treatment.

I hope that you find these recommendations helpful and that they serve as the basis for a productive conversation with your treating team. I wish you good fortune with your health.

LINKS FOR THE PATIENT

Guidelines from the National Comprehensive Cancer Network: http://www.nccn.org/
Leukemia Lymphoma Society: http://www.lls.org/
National Cancer Institute:

LINKS FOR THE TREATING PHYSICIAN

NCCN Lymphoma Guidelines: http://www.nccn.org/