VIEWS

The Weight Gain Conundrum—When to Intervene?

BY LISA SHEPARD, RD, CSO



e are all aware of the impact that obesity has on overall health and well-being. Recently, the impact of weight gain on cancer risk, recovery, and recurrence has become a major concern. In April 2012, the American Cancer Society (ACS) released new *Nutrition and Physical Activity Guidelines* that recommend "people living with cancer maintain a healthy weight, get enough exercise, and eat a healthy diet."

As an oncology dietitian, the weight gain conundrum poses the tricky question of when to intervene. Researching the many factors that contribute to weight gain during and after cancer treatment is challenging. It involves considering many scenarios and trying to identify what may be unforeseen, incidental, associative, and preventable. In looking at the literature and listening to my patients, I'm overwhelmed at the complexity of the situation and—at the same time—aware of the importance of early intervention.

Most often, I see the weight gain conundrum in breast cancer patients. With breast cancer, it seems that obesity is an established risk factor. The risk of estrogen positive and estrogen triple negative cancer is affected by obesity, perhaps more premenopausal with triple negative and more post menopausal with estrogen positive. These findings tell us that more than estrogen is at play. For breast cancer patients, weight gain—even a 10 percent gain for a person lean at diagnosis—can increase risk for recurrence by 30 percent.

Weight gain can also occur with other

cancers, particularly after chemotherapy, and especially with cancers that are hormone sensitive, such as breast, prostate, and uterine and endometrial cancers.

The dilemma we face as dietitians is multi-faceted. We really don't know what amount of weight truly poses a risk. We also sit with our patients who are articulate, educated, and committed to their health, yet we are sometimes challenged to help them with their weight gain. They tell us that they are eating less than they used to and they often are exercising to help create a deficit of calories, but they are still struggling to lose weight.

Although some of the factors contributing to the weight conundrum are not clearly identified, we do know that a "perfect storm" of events occurs.

The tumor itself may create some initial insult to the body. Stress, tumor necrosis factor, cytokines, and inflammatory hormones may begin to affect metabolism. Taste alterations can occur early on—before diagnosis—as well as during active treatment.

Steroids that are used to increase tolerance to chemotherapy can stimulate appetite, raise glucose levels, increase fat deposition, and contribute to sarcopenic obesity, a debilitating condition in which weight gain occurs as lean body mass is lost, leading to lower metabolism and impeding weight loss.

Reduced physical activity, common with cancer patients, can be exacerbated as routines are disrupted and lives are squeezed around cancer treatment. Fatigue may adversely affect food choices. Low

energy combined with tight schedules may prompt the choice of more processed, less nutritious take-out meals.

Higher cortisol levels resulting from fatigue and often associated depression and stress may further present metabolic imbalances from elevated glucose, more fat deposition, and decreased immunity. Other food-related side effects created by chemotherapy include nausea, altered taste, bloating, gas, diarrhea—all of which affect eating and can result in erratic eating patterns.

Many patients believe that cancer causes weight loss and may inadvertently overeat. "Comfort" foods may become staples during treatment. Friends may bring very caloric, high-fat casseroles and high-sugar treats to make life easier. Fruits, vegetables, and whole grains—the staples of immune-enhancing nutrients—are often overlooked. With the stress and discomfort of diagnosis and treatment, many patients believe it's just too much to have to focus on "healthy" eating. It may even be what we providers believe to some extent.

This cascade of weight gain and health implications for long-term disease-free survival begs the question of timing for intervention of diet and exercise. At the time of treatment we truly have a "teachable moment" that could affect long-term outcome. We need to educate our patients early on.

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