Supportive Care: Large Studies Ease Yoga, Exercise Into Mainstream Oncology

By Karyn Hede

Lots of small observational studies have suggested that yoga, exercise, and other mind–body techniques can reduce the stress and side effects of cancer treatment. But little compelling evidence has been available to support their use and most oncologists don’t include such alternative medicine approaches in treatment plans.

That could be changing, though. Large randomized trials of yoga have recently been concluded or are under way, and some cancer centers are beginning to offer complementary treatments in-house. Professional and patient groups have given space on their websites to these methods for coping with symptoms. And professional meetings are giving more time to complementary, or “integrative medicine,” approaches for symptom management.

Linda Sutton, M.D., medical director of the Duke Oncology Network in Durham, N.C., has observed the recent change in attitude in the oncology community toward exercise and other complementary techniques as part of treatment plans. At the 2009 San Antonio Breast Cancer meeting, she noted that for the first time the session on exercise and nutrition had a prominent place in the program.

“I think that there’s a building body of evidence that’s emerging in the mainstream cancer world regarding some of the add-on approaches to patients with breast cancer,” Sutton said.

Sutton attributes much of the recent interest in yoga and other exercise interventions to the increased emphasis on cancer survivorship and the well-documented fact that many people have lingering symptoms such as fatigue, sleep disturbances, and joint pain that are often inadequately addressed with conventional approaches.

And cancer patients themselves have pushed for alternatives. More than half regularly use complementary techniques in an attempt to treat symptoms or boost their immune systems, according to the 2007 National Health Interview Survey of nearly 24,000 participants, which included 1,471 cancer survivors.

In her experience, Sutton said, physicians are not so much against the use of, for example, yoga or meditation practices, as they are uncomfortable recommending these approaches because of a lack of clear data about who will benefit. “I think there’s still a lot of unanswered questions and more so than we are used to when we talk about giving tamoxifen or giving chemotherapy, where we have clear criteria as to who should get it,” she said.

Randomized Trials

Those questions are beginning to be answered, at least for some patients. A recent nationwide, multisite, phase II/III randomized controlled clinical trial examined the use of yoga to improve symptom management among 410 cancer survivors. It showed a statistically significant improvement in sleep (22% vs. 12%) and fatigue (42% vs. 12%) after 4 weeks of yoga versus usual care. The study, presented by principal investigator Karen Mustian, Ph.D., at the 2010 American Society of Clinical Oncology meeting, was the first large study to show clinical benefit to patients. What’s more, the patients in the 4-week-yoga arm reported a drop in use of sleep medication, whereas the control arm showed a slight increase.

Mustian said the results confirm many years of smaller studies in which patients self-reported benefits from yoga. Earlier studies may have failed to convince many practitioners because they were not rigorous enough. Also, concerns about safety emerged.

“Everyone was scared we were going to ‘break’ cancer patients,” said Mustian, who is director of the University of Rochester Cancer Center Community Clinical Oncology Program. “We spent a lot of time doing a lot of gentle things, a lot of walking, just to show we weren’t going to make the prognosis poorer and outcomes less optimal.”

Now, she said, evidence has shown that most cancer patients can safely exercise under physician supervision. A recent American College of Sports Medicine review of studies concluded that exercise is safe during and after cancer treatment and can improve quality of life for breast, prostate, and hematologic cancer survivors in particular.

The problem now, Mustian said, is that oncologists often don’t know who in the community is trained to work with cancer patients’ specific needs and limitations. But that problem too could recede as complementary approaches to supportive care enter the mainstream. For instance, the American College of Sports Medicine and the American Cancer Society teamed in 2009 to develop a certification program for exercise trainers who want to work with cancer patients. The society now recommends complementary therapy alongside mainstream medical treatment to relieve symptoms of cancer treatment, such as guided imagery to help relieve pain during medical procedures.

Building referral networks will take time, Mustian said, as both patients and providers become comfortable and accept that programs are safe and effective.
The solutions will differ with location and the circumstances of the patient, Sutton said. The resources available in New York will be much different from those in rural North Carolina, where many of her affiliates are located. “Every physician is within a system of care, and they look to the oncologists for leadership about what programs should be offered to patients,” she said. It’s the idea of ‘it takes a village’ to treat a cancer patient, a concept that the discipline of integrative oncology has embraced.

**In-House Centers**

Some cancer centers, like Memorial Sloan-Kettering in New York and M.D. Anderson in Houston, have brought complementary treatments in-house, making it easier to build exercise and mindfulness techniques into treatment and recovery plans. Vanderbilt-Ingram Cancer Center in Nashville, Tenn. has a Center for Integrative Medicine that offers a range of mind-body techniques for symptom management and to improve quality of life. Pinki Prasad, M.D., a pediatric hematologist–oncologist interested in yoga for children with cancer, is conducting a yoga clinical trial with adult breast cancer patients as a proof of concept.

“To devise a protocol that’s going to be accepted in the pediatric and adolescent medical community, we have to devise something in the adult community first that works,” she said. She and her mentor, Debra L. Friedman, M.D., wanted to extend the study of yoga beyond breast cancer survivors, where it has mostly been studied, to all cancer survivors. The study is examining fatigue and quality-of-life measures over a 10-week course.

At Hematology–Oncology Associates of Central New York, treatment plans can include acupuncture, yoga, and tai chi, among other options at a nearby wellness center. Jeffrey J. Kirshner, M.D., said that patients and practitioners alike are receptive to using complementary treatments. The practice was one of the accruing sites for Mustian’s yoga study, and Kirshner said he now regularly recommends yoga to his patients who are having sleep problems, citing Mustian’s data.

**Improving Compliance**

The use of complementary techniques is also gaining traction to control symptoms that might otherwise cause patients to stop taking their medication. Of particular concern are the many breast cancer survivors who stop taking prescribed aromatase inhibitors because of joint pain, fatigue, and menopausal symptoms. A May 2010 study of pharmacy claims data from 2006 published in Breast Cancer Treatment and Research revealed that over a 1-year period, 23% of 13,593 insured patients stopped taking their medication. A Canadian study presented at the 2009 San Antonio Breast Cancer Symposium put the figure at 40% over a 2-year period.

“Patients are actually being noncompliant with [aromatase inhibitors] because of the pain they are experiencing,” said Lorenzo Cohen, Ph.D., director of the integrative medicine program at the University of Texas M. D. Anderson Cancer Center in Houston. “If something like acupuncture can ease the pain of these drugs, that’s phenomenal.”

A few small, short-term studies have indicated that yoga may relieve symptoms associated with these medications. Similarly, a recent study of acupuncture for treatment of hot flashes in 267 post-menopausal noncancer patients conducted in Norway showed modest improvement after 12 weeks but no long-term benefit. The problem with such studies is that they are often not well controlled.

“There’s just not a lot of very effective drugs to manage the common things like fatigue and generalized pain without side effects,” said Jun J. Mao, M.D., cochair of the Penn Integrative Oncology Working Group, Abramson Cancer Center, Philadelphia, and a certified acupuncturist. Mao, who has studied physician–patient interactions regarding complementary medicine, said that as part of an ongoing study of patient outlook he has interviewed breast cancer survivors and found that “after what they have gone through with the chemo . . . some of them feel their body is toxic, so they want to try something that is more natural, something this is not a medication.”

Mao is conducting a direct comparison between acupuncture and gabapentin, an epilepsy drug that has shown efficacy for treating hot flashes. The trial is monitoring disease-free breast cancer survivors experiencing more than two hot flashes per day. Patients may be taking aromatase inhibitors for prevention of recurrence, but any breast cancer patient with menopausal symptoms is eligible.

More studies of complementary medicine in supportive care are on the horizon. The National Cancer Institute is sponsoring a $4.5 million phase III clinical trial, the largest study of yoga in cancer ever funded. The three-arm study, which Cohen will lead, will compare yoga, meditation, and simple stretching in 600 women with stage zero to III breast cancer undergoing radiation treatment at M. D. Anderson. In addition to reporting levels of physical function such as fatigue and sleep quality, participants will wear an activity monitor to measure quality of sleep and will have blood drawn to measure levels of cortisol, a neuroendocrine hormone linked to anxiety and depression. The study will also examine cost-effectiveness, as well as how quickly patients can return to work.

“At the end of the day, the doctors out there are looking for things to help their patients,” Cohen said. “There’s only one kind of medicine. . . . These concepts of ‘alternative medicine’ are something of the past.”