I am often asked, “How can I exercise? I’m in the middle of chemo or radiation therapy.” Evidence suggests exercise during treatment can help you feel better, keep your muscles from becoming weak, decrease fatigue, make you less dependent on others and decrease the risk of developing osteoporosis. In addition, when treatment is completed, you will have an easier time getting back to your normal routine.

Exercise can be low intensity and still help you feel better while maintaining or regaining your mobility. Moderation is the key. Not doing any type of exercise can lead to greater weakness and fatigue, making it even harder to get up and move when you start to feel better. Conversely, overzealous exercise can lead to muscle soreness and exhaustion. If you are too tired, sore or fatigued, you may need to skip a day.

If you exercised regularly before your cancer treatment, you will need to start at a lower intensity or exercise for a shorter period of time than you did previously, and allow more recovery time between exercise sessions. You should also increase the duration of aerobic exercise or the amount of weight you are lifting more gradually than you would have before treatment to avoid injury or excessive fatigue. If you are new to exercise, begin with a low level of exertion, like a brief walk.

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Treating cancer patients in clinical trials requires special knowledge and a highly trained clinical staff. The Froedtert & the Medical College of Wisconsin Clinical Cancer Center at Froedtert Hospital campus is one of a small number of cancer centers in the country with a treatment unit dedicated to supporting the needs of patients who take part in important cancer clinical trials.

Thanks to a grant from the Nicholas Family Foundation, the Nicholas Family Foundation Translational Research Unit (TRU) opened its doors in October 2013 to accommodate early phase and other complex clinical trials. The TRU is located within the Day Hospital on the third floor of the Clinical Cancer Center. There are 13 individual patient treatment bays and a waiting room with two treatment chairs. The TRU is also equipped with a small laboratory to process research samples.

Translational research is the process of bringing studies from the laboratory to the patient bedside. New drugs can take, on average, 11 to 15 years to move from the laboratory to obtaining Food and Drug Administration approval. This includes three to five years in the laboratory and eight to 12 years in clinical trials. Early phase trials help to evaluate these new therapies.

What is an early phase trial?

Early phase trials are those in the first two of three phases. Phase I trials include a small number of people to evaluate side effects and establish safe dosage levels for a drug being tested. A phase I trial may test a new drug for the first time in humans. Phase II trials, which include a larger group of patients, study the effectiveness of a new treatment while continuing to monitor its side effects. Early phase trials require frequent monitoring and assessments such as patient vital signs, blood draws and electrocardiograms. These assessments are done per the clinical trial protocol to monitor patient safety, to collect data and to determine a safe dose.

Currently, nurses in the TRU also care for patients enrolled in phase III cancer clinical trials. In a phase III clinical trial, the new treatment is compared to standard treatment in a much larger group of patients.

Staff nurses and technicians in the TRU have specialized training and education to care for patients taking part in clinical trials. Day-to-day operations are directed by the TRU service coordinator, who leads daily operations and provides direct patient care. Nurses and technicians on the unit partner with Froedtert & MCW Clinical Trials Office research coordinators and nurses, physicians and our Investigational Drug Service pharmacists. Since November 2013, the TRU has treated about 300 patients in clinical trials.

For more information on cancer clinical trials available through the Froedtert & MCW Cancer Network, please visit froedtert.com/clinicaltrials. If you are interested in taking part in a clinical trial, please talk with your doctor and health care team for more information.

Exercise (continued from cover)

Exercise veterans and novices may experience days when they feel too tired to exercise. On those days, try walking for five or 10 minutes or gentle stretching for 10 to 15 minutes.

After you have checked with your doctor and are ready to begin exercising, keep these important factors in mind:

- Blood count levels: Many cancer treatments affect blood count levels. When certain levels are low, exercise must be modified or even postponed. Three values you should be aware of are your hemoglobin (part of red blood cells that carry oxygen), white blood cells (when these levels are low, stay away from large crowds because your immune system is weak) and platelets. Platelets are responsible for clotting your blood. If platelet levels are low, you are at higher risk of bleeding after a fall.

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The diagnosis of brain metastases can have a significant impact on quality of life and function. We are fortunate that we are well-equipped to treat patients who receive this diagnosis. Our multidisciplinary team includes: neurosurgery, neuro-oncology, radiation oncology and neuropsychology services to comprehensively treat patients. In addition to our exceptional physicians and clinical staff, we employ state-of-the-art technology to diagnose and treat patients with brain metastases.

Stereotactic radiosurgery delivers a high, focused dose of radiation to metastatic brain tumors, usually in a single treatment. Stereotactic radiosurgery can be delivered along with radiation therapy to the whole brain or as a stand-alone treatment. Decisions for such clinical interventions are best suited for discussion in a multidisciplinary setting. One way to deliver stereotactic radiosurgery is with a tool called Gamma Knife. The Froedtert & MCW Cancer Network has had an active Gamma Knife Program since 1999. We recently purchased Gamma Knife Perfexion technology, giving us new tools to treat patients with brain metastases. Treatment with the Perfexion technology is much faster and, thereby, more convenient and comfortable.

In addition to Gamma Knife, clinical trials are available for some patients with brain metastases. When whole brain radiation therapy (WBRT) is recommended, one concern is the late effect of cognitive decline related to that treatment. One of our newly opened trials, NRG CC001, is evaluating if the delivery of WBRT, while avoiding a region of brain called the hippocampus, can reduce or eliminate cognitive decline. This trial is based on previous work showing that when the hippocampus was avoided during WBRT, cognitive function can be spared. NRG CC001 randomizes patients to standard whole brain radiation therapy without hippocampus sparing or whole brain radiation therapy with hippocampus sparing. All patients on the trial are treated with a neuro-protective agent called memantine, which is also thought to protect the brain from cognitive decline in patients who receive WBRT. This trial is currently open at Froedtert Hospital. We look forward to the results, as it may define a new standard of care in treating patients with metastatic disease to the brain.

A diagnosis of brain metastases can be distressing for patients. We are happy to offer compassionate, multidisciplinary care to our patients and state-of-the-art treatment with advanced technology and clinical trials. If you have been diagnosed with brain metastases and have questions regarding your treatment, please do not hesitate to contact your oncologist to discuss these options further.

- Bone health: Do you have osteoporosis, a history of joint problems or bone metastases? You may need to stay away from high impact movements like running or high impact aerobics.

- Nerve injury/neuropathy in hands and feet: Nerve issues can affect your balance. Exercises should be done with proper support to prevent falls and injuries. Selecting a stationary bike instead of an elliptical trainer would be a good choice.

After treatment and throughout survivorship, the American Cancer Society recommends getting 150 minutes a week of moderate intensity aerobic exercise (walking, dancing, leisurely biking, softball, mowing the lawn, etc.) or 75 minutes a week of vigorous exercise (jogging/running, aerobic dance, tennis, etc.). In addition to aerobic exercise, strength training should be completed two or three times a week with exercises targeting upper and lower extremities. At least one set of eight to 15 repetitions for each exercise is a good place to start.

Exercise is empowering. It improves your mood. It helps you maintain or get back to a healthy weight. A healthy weight decreases your cardiovascular risk and your risk of diabetes. Exercise also reduces the recurrence of some types of cancer (breast, prostate, colorectal and ovarian) and helps prevent other types of cancer (colon, breast, endometrial and lung).

Get moving and get stronger. Your body will thank you. To learn more about exercise, weight control and cancer prevention, consider one of these resources:

- American Cancer Society: cancer.org/healthy/eathealthygagetactive

- National Cancer Institute: cancer.gov/cancertopics/factsheet/prevention/physicalactivity

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**New Approaches to Brain Metastases**

*Joseph Bovi, MD, Radiation Oncologist*

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Support Groups and Events

The Froedtert & MCW Cancer Network offers support groups and sponsors events of interest to brain tumor patients and their families. For more information about our support groups, please visit froedtert.com, or call 414-805-3666 or 800-272-3666 (unless otherwise noted).

**BRAIN TUMOR SUPPORT GROUP**

The Brain Tumor Support Group is for patients and family members who are looking for information and encouragement. Meetings are designed for open discussion of concerns related to brain tumors with many sessions featuring speakers who focus on a variety of topics specific to this disease.

**YOUNG ADULT ONCOLOGY GROUP**

Children’s Hospital of Wisconsin offers the Young Adult Oncology Group for cancer survivors (on and off treatment) ages 18 to 39. This group provides survivorship support, education and social activities.

**CANCER CAREGIVERS SUPPORT GROUP**

This support group is for friends, family members or others caring for people with cancer. It promotes open communication of feelings, as well as providing relaxation and stress relief. Various topics of interest to the caregiver are also presented. (This group is made possible by donations to Froedtert Hospital Foundation.)

**EPILEPSY SUPPORT GROUP**

This support group is open to people with epilepsy, their family members, or caregivers. The group is in affiliation with the Epilepsy Foundation of Southeast Wisconsin. A guest speaker, each month, speaks on topics of interest related to seizures.

**CALENDAR**

**Brain Tumor Support Group**

Third Tuesday of each month
6:15–8 p.m.
Open discussion: 6:15–7 p.m.
Featured speaker: 7–8 p.m.
Froedtert & MCW Clinical Cancer Center at Froedtert Hospital campus, Conference Room L, First Floor

For topic and speaker information, please see the listing in the Hope Clinic in the Clinical Cancer Center, or call 414-805-3666 or 800-272-3666.

**Cancer Caregivers Support Group**

Fourth Tuesday of each month
5:30–7 p.m.
Clinical Cancer Center
Conference Room J, Lobby Level
Various speakers are offered.

**Young Adult Oncology Group**

Meets monthly; Dates and times vary.
Sponsored by Children’s Hospital of Wisconsin, the Medical College of Wisconsin and the Clinical Cancer Center.

More information: Kristin Bingen, 414-955-4148 or kbingen@mcw.edu.

**Epilepsy Support Group**

Fourth Wednesday of each month
6:30-8 p.m.
Froedtert Hospital campus
2NT Conference Room
North Tower, Second Floor

For questions, concerns or suggestions, please call Linda Allen, RN, (Epilepsy Program coordinator) at 414-805-3641 or LeeAnn Lathrop, MSW (social worker) at 414-805-2894.