ECHN General Surgeon Offers New Breast Cancer Treatment Procedure

MANCHESTER, CONNECTICUT – A general surgeon on the medical staff of Eastern Connecticut Health Network is the first in the region to offer a procedure that dramatically shortens the length of time required for radiation therapy after a woman has had a lumpectomy for breast cancer.

Laureen F. Rubino, MD, is the only surgeon in eastern Connecticut trained in breast brachytherapy using a multi-lumen balloon called Contura. The Contura device allows radiation to be delivered from inside the breast rather than outside the body, which increases its effectiveness, limits its impact on health tissue, and reduces the number of radiation sessions needed.

Radiation therapy is given to most patients who have a lumpectomy for breast cancer, to kill cancer cells or prevent them from reproducing or spreading, reducing the risk of recurrence. Whole-breast irradiation uses a radiation source outside the body to treat the cancer site. It typically involves daily treatments, five days a week, for six weeks.

With this new brachytherapy procedure, radiation treatments are delivered twice a day for only five days. “This is a wonderful new treatment option and we’ve had great results,” Dr. Rubino says. “For women with breast cancer who need a lumpectomy and radiation, their entire cancer treatment – surgery plus radiation – can be completed in just two weeks.”

The Contura is a small balloon-based device implanted into the breast to treat the “rind” of tissue surrounding the cavity left by lumpectomy surgery. After it is inserted, the balloon is inflated and filled with saline. Then a radiation seed is sent through five separate “lumens” of channels inside the balloon, allowing the radiation dose to reach the targeted area.

Balloon brachytherapy has been available for some time, but Contura is the first to provide more than one channel for the delivery of the radiation seeds. “The treatment itself takes only about seven minutes, with the patient sitting comfortably in a recliner,” Dr. Rubino says. “My patients have continued to work or perform their normal activities without feeling tired, which is a common side effect of traditional external radiation therapy.”
Nearly all women diagnosed with breast cancer require some form of surgery as part of treatment. At one time, the only surgical option for breast cancer was mastectomy, which involves removal of the entire breast as well as the surrounding muscle and lymph nodes. Today, an option for many patients is lumpectomy, also called breast conservation therapy, which involves the removal of the cancerous tissue and an additional rim of tissue surrounding the cancer, followed by radiation therapy.

Brachytherapy come from a Greek word meaning “close” or “internal,” which refers to the way in which treatment is delivered from the inside rather than the outside. The Contura device is used at more than 125 clinical sites across the nations, including major cancer treatment institutions. Clinical studies have shown it to be equally as effective as external radiation, with fewer undesirable side effects.

Dr. Rubino performs the implantation of the un-inflated Contura balloon inside the lumpectomy cavity about a week after surgery, in her office located at 945 Main Street in Manchester. The balloon is inflated with saline and connected to a flexible catheter that is outside the breast. Gauze padding is placed around the catheter and taped down so that the patient can move around freely between treatments.

During treatment, the catheter is connected to a computer-controlled machine that automatically transfers a radiation seed through the catheter and into the balloon. Once therapy is complete, the seed is removed, the machine is disconnected, and the patient can return to normal activities. Each treatment session takes about 30 minutes from set-up to completion.

For now, treatment is delivered at Hartford Hospital, which partners with ECHN in offering radiation therapy, but the goal is to have this special machine available at The John A. DeQuattro Community Cancer Center, adjacent to Manchester Memorial Hospital, in the near future.

After the five-day course of treatment, the Contura balloon is deflated inside the breast and gently removed, and the incision is closed with a bandage. Most women will feel little or no discomfort either during insertion or removal.

“I have a strong commitment to breast patients, and the treatment of breast cancer is a major part of my practice,” explains Dr. Rubino, who has practiced in Manchester for 12 years. “This procedure can dramatically change the impact that a new breast cancer diagnosis can have on a woman’s life.”

ECHN is a not-for-profit health care system serving 19 towns in eastern Connecticut, through its network of affiliates that include Manchester Memorial Hospital, Rockville General Hospital, Woodlake at Tolland (a 100-bed nursing home and short-term rehabilitation facility), the ECHN Medical Building at Evergreen Walk in South Windsor, which houses the Women’s Center for Wellness, and ECHN Health Services Inc. (a series of medical practices owned and operated by ECHN). It is in partnership with Visiting Nurse & Health Services of Connecticut Inc., Connecticut Occupational Medicine Partners Inc., Ambulance Service of Manchester, Aetna Ambulance, Metro Wheelchair, and Saint Francis Care (which partners with ECHN on the Cardiac Catheterization Laboratory of the Hoffman Heart Institute of Connecticut at Rockville General Hospital), Community CancerCare Inc. (which provides radiation therapy services at The John A. DeQuattro Community Cancer Center in Manchester). ECHN is also affiliated with Connecticut Children’s Medical Center.