



SPOTLIGHT

New Procedure Combines Radiation with Surgery

EARLY SCREENING. EXPERT CARE.

At Goshen Center for Cancer Care, we use the most innovative technology and deliver the highest quality of compassionate care, offering the best chance for treatment success and survival.

Breast Cancer Team

Dr. Daniel Bruetman
Medical Oncologist

Dr. Victoria Owens
Pathologist

Dr. Leonard Henry
Surgical Oncologist

Dr. Houman Vaghefi
Radiation Oncologist

Dr. Laura Morris
Breast Surgical
Oncologist

Dr. James Wheeler
Radiation Oncologist

Dr. Michael Brendle
Radiologist

Betsy Garber, NP

Other Team Members

Dr. Roderich Schwarz
Medical Director,
Surgical Oncologist

Dr. Ebenezer Kio
Medical Oncologist

Dr. Sachin Agarwal
Medical Oncologist

Dr. Emily Moore
Naturopathic Doctor

Dr. Hubert Fornalik
Gynecologic Oncologist

Dr. Rebecca Snowden
Naturopathic Physician

Dr. Ashley Hardy
Surgical Oncologist

Ingrid Bowser, NP

Kacy Davis, NP

Dr. Urs von Holzen
Director of Thoracic
and Minimally Invasive
Surgical Oncology

Sherise Deardorff, PA

Nicole Fornalik, PA

Brooke Martin, NP

To refer a patient to Goshen Center for
Cancer Care, call (574) 364-2962.

Intra-Operative Radiation Therapy

Helping breast cancer patients receive radiation sooner

June 7, 2017, physicians at Goshen Hospital treated their first three patients with a new form of radiation therapy called Intra-Operative Radiation Therapy (IORT). In the 1970s and 1980s, results from randomized clinical trials demonstrated that patients with early stage breast cancer have identical survival with breast conservation surgery and post-operative radiation therapy to the whole breast as compared to women who underwent a mastectomy.

The typical course of radiation was five to six and a half weeks. Although radiation treatments were effective at controlling the cancer, the long course of radiation therapy was a burden to working women and often was not feasible for women who did not live close to a radiation therapy center.

Shorter courses of radiation

Shorter courses of radiation therapy were tested for women with early-stage breast cancer at centers around the world. A treatment scheme tested in a large Canadian study with 10 years of median follow-up demonstrated that a three-week course of 16 treatments was as effective as the longer five-week course of treatment and had no worse side effects.

The location of cancer recurrences

Analysis of the failure patterns from women who underwent breast-conserving surgery without radiation

therapy highlighted the fact that most cancer recurrences in the breast were located within roughly 1 centimeter of the operative cavity.

Treating only the part of the breast near the surgical cavity allowed the radiation to be delivered even more quickly, with only 10 treatments twice daily over five days.

Moving to one targeted treatment

Clinical trials in Europe demonstrated that some patients could be treated with only a single dose of radiation, delivered in the operating room at the same time the surgeon removes the tumor (IORT).

The TARGIT-A trial enrolled 2,298 women. Those women receiving IORT and no other radiation therapy had a five-year local recurrence rate of only 2.1 percent. IORT was not as effective if the tumor was first removed and then, a few weeks later, the IORT was delivered as a second procedure.

Identifying ideal candidates for IORT

Women who are suitable for IORT must meet all of the following criteria:

- At least 50 years old
- Tumors \leq 2 centimeters with good negative margins
- Invasive ductal histology
- Estrogen receptor positive tumors
- No cancer in the axillary lymph nodes

Patients who have adverse pathology features may need additional radiation therapy, typically with the shorter, three-week schedule.



Spotlight on Intra-Operative Radiation Therapy

In conclusion

There has been a growing trend towards shorter courses of radiation to reduce travel time and the burden on the patient. The ultimate convenience is to receive a single dose of radiation while in the operating room at the time of tumor removal. The surgical and radiation oncologists work together for the benefit of our patients. We are very excited to be able to provide this new treatment technique. We have a prospective registry collecting information on the treatment effectiveness, cosmetic results and patient quality of life for our patients who choose IORT.

This article was written by Dr. James Wheeler, MD, PhD, a board certified radiation oncologist. Dr. Wheeler is the Director of the Radiation Oncology Program at Goshen Center for Cancer Care. He has extensive experience in the latest techniques for treating cancer and supports treating patients on clinical trials.



Dr. James Wheeler

The role of the pathologist

At Goshen Hospital, our pathologists work closely with our team of breast surgeons, radiation oncologists and medical oncologists with a multidisciplinary approach. Our pathologists evaluate the breast surgical specimens during the IORT procedure and afterwards to help determine the best treatment approach for our patients.

Intraoperative assessment of the sentinel lymph node is performed and if the lymph node is negative, the patient is able to proceed with the IORT procedure. If necessary, intraoperative assessment of the breast excision specimen can be performed to help evaluate surgical margin status and size of the tumor, all of which would impact the IORT procedure.

After the surgery is performed, our pathologists examine the surgical specimens at the microscopic level to summarize our findings. These tumor characteristics are then presented and discussed at our interdisciplinary breast conference to determine if the IORT treatment is sufficient or if the patient needs additional radiation. – **Dr. Victoria Owens, Pathologist**

“Women have been asking about Intra-Operative Radiation Therapy for the past two years because they want treatment that is safe, cutting-edge and convenient,” says Laura Morris, MD, MBA, FACS, breast surgical oncologist, medical director, at the Goshen Retreat Women’s Health Center. “Patients who qualify for the procedure are able to receive their surgery and radiation at the same time, plus the treatment is more convenient without compromising outcomes.”

TO REFER A PATIENT

Goshen Center for Cancer Care and Goshen Retreat Women’s Health Center work together to provide holistic, complete care for patients. Goshen Retreat Women’s Health Center is a comprehensive, state-of-the-art Women’s Services Program, designed by women for women. To refer directly to the Retreat, call **(574) 364-4611**. To go through the Goshen Center for Cancer Care, call **(574) 364-2962**.

If you would like more information or to meet any of our doctors, please contact **Jenny Rupp, Physician Liaison**, at jrupp2@goshenhealth.com or **(574) 364-2978**.