

M.D. NEWS

A BUSINESS AND LIFESTYLE MAGAZINE FOR PHYSICIANS

A man with grey hair and a mustache, wearing a dark suit, white shirt, and patterned tie, is sitting in front of a large, circular medical device, likely a CT scanner. He is smiling and looking towards the camera. The device is light-colored with a dark circular opening in the center.

Shields Opens New Radiation Oncology Center in Mansfield

Joint Venture Between Shields Health Care Group, Morton Hospital and Sturdy Memorial Hospital Brings State-of-the-Art Radiation Oncology to Residents of Southern Massachusetts

Shields Opens New Radiation Oncology Center in Mansfield

Joint Venture Between Shields Health Care Group, Morton Hospital and Sturdy Memorial Hospital Brings State-of-the-Art Radiation Oncology to Residents of Southern Massachusetts

By Kathryn Siranosian, M.S.

The field of radiation oncology has undergone nothing short of a revolution over the past 10 years. Technological advances have ushered in not only exciting new modalities, but innovative, redesigned equipment as well. Of course, improved treatment protocols followed suit and, as a result, radiation therapy is now generally more successful — and better tolerated — than ever before.

As it turns out, these improvements couldn't come at a better time. State health officials predict that Massachusetts' graying baby boomers will soon require unprecedented levels of cancer care. By some estimates, over 38,000 residents will be diagnosed with cancer in 2010 — remarkably, that's an 18% increase above the number of new cases diagnosed in 2000.

In an effort to meet this growing demand *and* improve community access to cutting-edge radiation therapies, Shields Health Care Group has opened two suburban radiation oncology cen-

ters to complement South Suburban Oncology in Quincy, which came on line in 1995. Reaching out to patients north of Boston, Shields Health Care Group teamed up with Winchester Hospital and opened the Winchester Hospital Radiation Oncology Center in the spring of 2007.

Now, the group is expanding its services to the south of the city with the launch of Shields Radiation Oncology Center Mansfield (SROCM), a new facility at 89 Forbes Boulevard, Suite 1500, in Mansfield. This third center is a joint venture between Shields Health Care Group, Morton Hospital and Sturdy Memorial Hospital.

“With this new center, patients in southeastern Massachusetts can get state-of-the-art radiation therapy right in their community,” says radiation oncologist H. Joseph Barthold, M.D., Medical Director for Shields Oncology Services. “We offer the best equipment, and

we're one of only a very few centers in New England to have this level of equipment, and we offer a collaborative approach to both radiation therapy and cancer management.”

The new center will offer residents in southeastern Massachusetts the very latest in technology, along with a collaborative approach to both radiation therapy and cancer treatment.



PHOTO BY DEBRA TROYANOS

CUTTING-EDGE MODALITIES AND STATE-OF-THE-ART EQUIPMENT

The on-site medical staff at SROCM includes board-certified radiation oncologists, radiation oncology therapists, a radiation physicist, a dosimetrist and full-time radiation oncology certified nurses. These medical professionals work in conjunction with other specialists from Morton Hospital, Sturdy Memorial Hospital and from throughout the Shields Health Care network, ensur-

ing that patients receive world-class, collaborative radiation oncology care.

The SROCM radiation oncology team uses the most advanced modalities available today, including intensity modulated radiation therapy (IMRT), image-guided radiation therapy (IGRT) and respiratory gating.

For example, at SROCM, prostate cancer is now routinely treated with sophisticated IGRT. For this type of radiotherapy, the center's radiation oncologists use fiducial markers implanted in the prostate to localize the tumor before each treatment. The fiducials help the radiation oncologists detect the small micro-movements that are typical of internal organs (especially the prostate) so that they can adjust the radiation beam accordingly. Higher curative doses can be aimed directly at the tumor while sparing normal, surrounding tissue. Over the past 10 years, research has shown that this type of IGRT has dramatically improved outcomes for patients with certain prostate cancers.

"We can precisely direct the beam only at the tumor, and in that manner we can aim at a much smaller volume," Dr. Barthold explains. "If I'm trying to hit a golf ball-sized tumor, but it's moving around an inch in each of the various directions, in order to hit it every day, before, I had to aim at a tennis ball. Now, though, since I know precisely where the golf ball is, I only have to aim at the golf ball. We miss a lot more of adjacent structures, and that cuts down on side effects."

Fiducial markers are particularly well-suited to the prostate. However, their application is limited in other anatomy. Consequently, the SROCM radiation oncology team must use a different type of IGRT for other cancers. Specifically, the center's top-of-the-line linear accelerator is equipped with a built-in CT scanner, a recent innovation that allows the radiation oncology team to monitor the location of a tumor on a daily basis while the patient is positioned on the treatment table. A quick CT scan allows the SROCM radiation oncology team to pinpoint the exact location of a tumor, so that they can direct the radiation beam more accurately than ever before. As in

the prostate cancer example, treating tumors with this type of precision improves outcomes *and* diminishes side effects.

"Over the last decade, it has been proven that more dose cures more patients, and now we can do that in a way that's safe," Dr. Barthold says. "We can apply higher dose without higher risk. This new technology improves the therapeutic ratio."

In addition to cutting-edge IGRT, SROCM also offers the latest in 4-D CT simulator planning and respiratory gating. These days, radiation oncologists routinely individualize radiation therapy based on the three-dimensional aspects of a tumor. But, the radiation oncology team at SROCM now takes this planning process one step further. They use 4-D CT simulator planning to add the fourth dimension — time — to the treatment plan for certain cancers. This 4-D plan accounts for the regular movements of the body during breathing and with it, the radiation oncology team can design a sophisticated treatment plan that applies high doses of radiation only when the tumor is precisely in the right location. As the patient breathes and the target moves out of position, the radiation beam instantly shuts off, significantly reducing exposure of normal tissue. This state-of-the-art "respiratory gating" technology has already shown great promise in the treatment of certain lung cancers.

Pictured at the ribbon cutting ceremony are (left to right) Gary Proulx, M.D.; Tom Porter, CEO of Morton Hospital and Medical Center; Jack Shields, President of Shields Health Care Group; Tommy Shields, Executive V.P. of Shields Health Care Group; Bruce Auerbach, M.D., Vice President and Chief, Emergency and Ambulatory Services at Sturdy Memorial Hospital; Peter Hulick, M.D.; Linda Shyavitz, President of Sturdy Memorial Hospital; and Joseph Barthold, M.D., Medical Director for Shields Oncology Services.



A TEAM APPROACH TO BOTH RADIATION THERAPY AND CANCER MANAGEMENT

Of course, SCROM offers patients more than advanced technology. The center also provides a highly trained, compassionate staff, one that specializes in patient-centered, multidisciplinary treatment plans.

In fact, at SROCM, physician collaboration is the cornerstone of every patient's treatment protocol. Shields' three radiation oncology centers are comanaged by a team of six seasoned radiation oncologists (with two additional physicians scheduled to join them in September). They are on staff at Massachusetts General Hospital and have faculty appointments at Harvard University.

"These physicians hail from a variety of training backgrounds and together they offer a depth of experience not typically seen in suburban radiation oncology centers," Dr. Barthold says. Most importantly, they put their collective expertise to work for SROCM patients.

"We meet on a weekly basis, and we talk about each patient as a group," Dr. Barthold explains. "All management decisions are made by the group. We have a peer review that oversees all patients and treatments, as well as reviewing the latest literature and the latest treatment approaches — all to ensure that patients get the best treatment possible. That's something that you just don't get at other stand alone radiation oncology centers."

SROCM also offers physician collaboration on a larger scale. This teamwork is the foundation of what Dr. Barthold calls "coordinated cancer management," and it's made possible by the partnership between the Shields Health Care Group, Morton Hospital and Sturdy Memorial Hospital. In addition to serving on tumor boards and cancer committees at each of the hospitals, SROCM radiation oncologists are linked electronically to hospital patients' medical records.

"We don't have to wait for records to be sent," Dr. Barthold explains. "We have access electronically to reports, like pathology studies and radiology studies."

Linked medical records make it easy for SROCM to provide coordinated mul-

tidisciplinary care — an approach that has proven to contribute significantly to successful patient outcomes.

"Cancer management in 2007 is completely different than it was a decade ago," Dr. Barthold says. "At this point in time, it's not just about one physician, or one group of physicians, doing the radiation. Instead, it's a very close integral relationship between radiation oncologists, the surgeon, the medical oncologists and the primary care physician. A patient's cancer management is done by a team of physicians, and that maximizes the benefits of what each physician has to offer. We all work very carefully together to integrate the ordering of tests and the coordination of follow-up visits, so that cancer management and follow-up is done in a coordinated way that's smoother and easier for the patient and the patient's family."

The combination of technological advances and coordinated cancer management has resulted in improved outcomes, Dr. Barthold stresses.

"Despite seeing more cancers, we're treating them with statistically much higher rates of success," he says. "It's great that this center can offer convenient, local access to this level of cancer care." ■

For more information about the Radiation Oncology Center in Mansfield or to refer a patient, please call (508) 261-2000 or visit www.srocmansfield.com

Physicians at the SROCM don't have to wait for records to be sent because they have access electronically to reports, like pathology and radiology studies.

