HEALTH

More U.S. Hospitals Offering Proton Beam Therapy

NewsUSA

(NU) - Proton beam therapy is increasingly being used to treat various cancers — so much that new centers are being planned for Hampton University in Virginia and the University of Pennsylvania Medical Center in Philadelphia.

The new sites are expected to cost between $190 and $250 million and open over the next three years. Dr. James Slater of Loma Linda University Medical Center in Southern California, a pioneer of clinical proton therapy, foresees upwards of 100 proton centers in the U.S. in the coming decades.

Proton beam therapy is a type of radiation that can precisely target tumors while sparing surrounding tissue and causing fewer side effects than traditional radiation. Proton beams deliver a low dose of therapy as it enters the body and releases virtually all of its energy at the targeted tumor site.

Currently there are three other proton beam therapy centers operating in the U.S. They are located at Loma Linda University Medical Center, Indiana University in Bloomington and Massachusetts General Hospital in Boston. They collectively have the capacity to treat 5,000 patients annually.

The center at Loma Linda, which opened in 1990, is the world's first hospital-based proton treatment facility.

Initially, many radiologists and oncologists questioned the therapy's cost and effectiveness. However, by the late 1990s, many had begun to recognize its benefits as studies showed excellent outcomes and significantly reduced side effects.

And that's when Massachusetts General Hospital, the teaching hospital for Harvard's medical school, built the second U.S. hospital-based proton treatment facility. Indiana University's Midwest Proton Radiotherapy Institute opened for clinical care next.

"Oncologists have long known that substituting proton radiation for X-rays now used to treat about half of all cancer patients would do less harm to normal tissues and organs and more damage to malignant growths," said Dr. James Cox, chairman of radiation oncology and medical director of the proton cancer center at M.D. Anderson Cancer Center in Houston, which is set to open in spring 2006.

Seven proton centers are either under construction or being planned nationwide, said Leonard Arzt, executive director of the National Association for Proton Therapy. By the summer of 2006, the University of Florida's Proton Therapy Institute will begin treating patients on the Shands Medical Center campus in Jacksonville.

Loma Linda has performed more than 250,000 proton treatments on more than 10,000 patients for various types of cancers, including prostate, head and neck tumors, eye tumors, certain lung cancers and abdominal cancers.

"At first, we treated three or four types of tumors, now we treat 50 types," said Dr. Jerry Slater, chairman of radiation medicine at Loma Linda, which plans a new scanning technology to treat breast and more complicated lung cancers.

For more information, visit www.proton-therapy.org or call (800) PROTONS.