ASTRO: Less-Invasive Procedure Appropriate for Early Stage Breast Cancer Patients with Cardiac Pacemakers, AHN Research Finds

New Allegheny Health Network research has found that early stage breast cancer patients with cardiac pacemakers – who are typically advised to choose mastectomy, or complete breast removal – can be successfully treated with lumpectomies in combination with whole breast radiotherapy (WBRT).

Pittsburgh, PA (PRWEB) September 26, 2016 -- New Allegheny Health Network research, presented this week at the American Society for Radiation Oncology (ASTRO) meeting in Boston, has found that early stage breast cancer patients with cardiac pacemakers – who are typically advised to choose mastectomy, or complete breast removal – can be successfully treated with lumpectomies in combination with whole breast radiotherapy (WBRT).

A breast-conserving lumpectomy followed by radiation therapy is the preferred treatment for most early stage breast cancer patients, but radiation can damage cardiac pacemakers. Some are advised to have the implanted device relocated prior to surgery, which can be an unsafe procedure for some patients.

“We want to raise awareness that radiation following lumpectomy can be safely used to treat these women, without damaging the pacemaker or sacrificing efficacy,” said Mark Trombetta, MD, System Director of Clinical Programs, AHN Cancer Institute, Division of Radiation Oncology. “With careful planning of radiation treatment, these women can feel confident in choosing to preserve their breast. For most patients, mastectomy can be avoided.”

The AHN researchers studied 20 women with early stage breast cancer and cardiac pacing devices, all of whom had been advised to consider mastectomy. They underwent lumpectomies, then radiation treatment with a variety of modalities chosen and calibrated in order to avoid exposing the pacemaker to excessive radiation.

Pre-treatment planning estimated the dose of radiation to the device, and a dosimeter measured exposure during treatment. The pacemaker’s function was monitored prior to, during and after treatment.

None of the patients experienced device failure, and all are disease-free at a mean follow-up time of three years. One woman’s pacemaker recalibrated during treatment and was immediately reset to specifications.

“Mastectomies, although therapeutic, cause disfigurement and have lasting side effects such as lymphedema and limited arm movement,” said Thomas B. Julian, MD, Director of Breast Surgical Oncology at AHN. “We are happy to be able to offer women with pacemakers a less invasive surgical option that effectively treats their cancer and retains their dignity and quality of life.”

“Allegheny Health Network has long been known for research that reduces the treatment burden for women with cancer,” said David Parda, MD, Chair, Allegheny Cancer Institute. “Our patients know that we will provide them with effective, evidence-based treatment that addresses their individual needs.”

About Allegheny Health Network Cancer Institute
The Allegheny Health Network Cancer Institute is home to a comprehensive cancer prevention, diagnosis, treatment, education, and research program that provides the complete spectrum of oncology care. The Network
is comprised of more than 50 oncology clinics across the western Pennsylvania region, including hospital-based programs at Allegheny General Hospital, Allegheny Valley Hospital, Forbes Hospital, Jefferson Hospital, West Penn Hospital and other collaborative hospital partners. The Network is home to more than 200 medical, surgical and radiation oncology physicians, one of the state’s largest bone marrow transplant and cellular therapy programs, and the nation’s largest radiation oncology network accredited by both the American Society for Radiation Oncology and American College of Radiology. Allegheny Health Network’s cancer research program offers patients access to more than 200 clinical trials and the Network’s physicians hold leadership roles at the National Cancer Institute, the NCI-funded National Surgical Adjuvant Breast and Bowel Project, (the world’s foremost breast and bowel cancer research group based at Allegheny General Hospital), and many national and international organizations that advance cancer care. The AHN Cancer Institute also has a formal collaboration with the Johns Hopkins Sidney Kimmel Comprehensive Cancer Center to share knowledge and expertise to advance patient care, education, and research for cancer patients and oncology professionals.

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