Radiation therapy technique successfully treats pain in patients with advanced cancer

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Stereotactic radiosurgery (SRS), a radiation therapy procedure pioneered at the University of Pittsburgh Cancer Institute (UPCI) that precisely delivers a large dose of radiation to tumors, effectively controls pain in patients with cancer that has spread to the spine, according to researchers from UPCI. The results of the research will be presented this week during the American Society for Radiation Oncology (ASTRO) annual meeting in Chicago.

The study, led by Dwight E. Heron, M.D., associate professor and vice-chairman of the Department of Radiation Oncology at the University of Pittsburgh School of Medicine, compared the effectiveness of single and multi-session treatments of SRS in controlling patients' pain. According to Dr. Heron, cancers can frequently spread to the bone and the spine is the site most commonly involved, which can be extremely painful. "Conventional radiation therapy is not always effective in alleviating bone pain resulting from spread of cancer to the spine. In patients who have previously received radiation, few options for effective treatment exist," Dr. Heron said.

The study reviewed the outcomes of 228 patients treated with SRS at UPCI and Georgetown University Medical Center (GUMC). Patients at UPCI received a single treatment of SRS while patients at GUMC generally received three treatment sessions.

"Both arms of the study successfully proved that SRS is a safe and effective form of treatment for patients with cancer that has spread to
their bones, even in patients who had previously received radiation to the spine," said Dr. Heron. "Interestingly, patients who received only one treatment experienced faster onset of pain relief but those who received three treatments experienced relief for longer periods of time. Additionally, patients who received three treatments had less need for re-treatment and greater survival rates."

Source: University of Pittsburgh Schools of the Health Sciences (news : web)