Rare pancreatic cancer patients may live longer when treated with radiation therapy

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Radiation therapy is effective in achieving local control and palliation in patients with pancreatic neuroendocrine tumors (PNTs), despite such tumors being commonly considered resistant to radiation therapy, according to a largest of its kind study in the November 15 issue of the *International Journal of Radiation Oncology*Biology*Physics*, the official journal of the American Society for Radiation Oncology (ASTRO).

PNT is a very rare form of pancreatic cancer that can stay confined to the liver and often cause death from liver damage. Since it is usually unable to be removed by surgery, external beam radiation therapy (EBRT) is an attractive option for managing the disease, but the role of EBRT is largely unknown because of the low incidence of this tumor type and, as a result, very few related studies.

Researchers at the departments of radiation oncology and internal medicine, division of hematology/oncology and comprehensive cancer center biostatistics unit at the University of Michigan in Ann Arbor, Mich., sought to determine if PNTs are not as resistant to radiation therapy as was previously thought.

Records from 36 patients with PNTs who were treated between 1986 and 2006 with radiation therapy to 49 sites were reviewed and it was found that in 39 percent of patients the tumor shrunk to less than half its pretreatment size after being treated with EBRT. Also, radiation therapy treatments achieved high rates of local control and 90 percent of patients

experienced palliation of symptoms such as pain, nausea, vomiting or obstructive jaundice.

Theodore S. Lawrence, M.D., Ph.D., FASTRO, an author on the study and chair of the University of Michigan Department of Radiation Oncology, said, "While this particular type of cancer can have potentially devastating effects on a patient, this study proves that using external beam radiation therapy may permit these patients to live longer, which is a very positive breakthrough for a disease that can have very negative outcomes."

Source: American Society for Radiation Oncology