

Stereotactic radiotherapy slows pancreatic cancer progression for inoperable patients

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For pancreatic cancer patients unable to undergo surgery – the only known cure for this form of cancer – a highly targeted cancer radiation therapy may help slow cancer progression and lessen disease symptoms, according to researchers at Henry Ford Hospital in Detroit.

Called stereotactic body radiotherapy (SBRT), the study found it was able to delay pancreatic [cancer progression](#) locally, on average, by almost six months.

While, on average, the patients in the study lived about 10 months, one-third lived more than a year.

Without any treatment – surgery, chemotherapy or [radiation](#) therapy – most pancreatic cancer patients only live about four to six months.

"Our research establishes stereotactic body radiotherapy as a reasonable treatment option for patients who can't have surgery or aren't candidates for chemotherapy," says study lead author Michael Haley, D.O., a resident in the Department of Radiation Oncology at Henry Ford Hospital.

"While it's not a curative therapy, it does seem to allow some progression-free survival benefit with minimal side-effects for patients. Ultimately, we're able to provide a treatment to patients who don't have any other options other than a traditionally prolonged course of radiation, which may not be as effective, and possibly has more side effects."

Says study co-author Munther Ajlouni, M.D., senior staff physician in the Department of Radiation Oncology at Henry Ford: "SBRT allows us to effectively treat patients who are unable to tolerate prolonged, aggressive therapy within a short period of time and with minimal toxicity."

The study will be presented Nov. 2 during the poster session at the 52nd annual American Society for Radiation Oncology (ASTRO) meeting in San Diego. Results also are online in the November issue of the International Journal of Radiation Oncology.

According to the National Cancer Institute, in 2010 there will be an estimated 43,140 new cases of pancreatic cancer, and approximately 36,800 will die from the disease. Risk factors for pancreatic cancer include smoking, diabetes, obesity, family history of the disease and pancreatitis. Most people diagnosed with the disease are older than 65.

Surgery is the only known cure for resectable pancreatic cancer, where the cancer is localized to the pancreas and hasn't spread.

It is estimated that only 20 percent of pancreatic cancer patients have their tumors present with localized disease amenable to surgical removal. A select number of those patients, however, are not candidates for surgery due to having other co-morbidities such as heart disease. This leaves only chemotherapy and radiation, or a combination of the two, available for treatment.

SBRT is a method of giving radiation that can be highly targeted to the tumor, sparing the normal tissue around it. It also provides a higher dose of radiation, meaning patients have fewer treatments. It is most commonly used for lung cancer patients, but has been used for liver and brain tumors as well.

The Henry Ford study looked to determine if SBRT was a viable option to slow cancer progression in medically inoperable patients with potentially resectable pancreatic cancer.

The study included 12 medically inoperable patients with stage I or II [pancreatic cancer](#). The median patient age was 83. Patients received between three and seven SBRT treatments.

Among those patients whose cancer spread, SBRT was able to slow cancer progression for five to six months. Once the patients' cancer started to progress, they lived about 2.5 months. "This may indicate that this slowing of the progression of disease accomplished by SBRT may modestly increase overall life span," notes Dr. Haley.

A few patients reported some minor side effects from treatment, including fatigue, loss of appetite and weakness. Two patients developed gastric ulcers, but both recovered.

Provided by Henry Ford Health System

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