Targeted radiation therapy safe, effective treatment for elderly with pancreatic cancer

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A highly targeted cancer radiation therapy may offer a safe and effective treatment option for elderly pancreatic cancer patients unable to undergo surgery or combined chemotherapy and radiation therapy, according to researchers at Henry Ford Hospital in Detroit.

Called stereotactic body radiotherapy (SBRT), the study finds patients lived, on average, six to seven months longer following treatment with minimal side-effects even when they had other severe comorbidities such as chronic obstructive pulmonary disease (COPD), heart disease and diabetes.

Two of the patients in the study lived nearly two years.

"Elderly individuals, those ages 75 and older, account for approximately 40 percent of patients diagnosed with pancreatic cancer," says study lead author Raphael Yechieli, M.D., with the Department of Radiation Oncology at Henry Ford Hospital.

"These patients are too ill to receive any other treatment, but with stereotactic body radiotherapy we're able to deliver a safe and effective treatment in two weeks that can provide them with a substantial quality of life with minimal side effects."

The study was presented at the 55nd annual American Society for Radiation Oncology (ASTRO) meeting in Atlanta.
In 2013, there will be an estimated 45,220 new cases of pancreatic cancer, and approximately 38,460 will die from the disease, according to the National Cancer Institute. 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 amendable to surgical removal.

A select number of those patients, however, are not candidates for surgery due to having other co-morbidities such as COPD, heart disease and diabetes. This leaves only chemotherapy and radiation, or a combination of the two, available for treatment.

But for a large portion of elderly patients with localized pancreatic cancer even chemotherapy and radiation therapy are not options.

The Henry Ford study looked to determine if SBRT – a method of giving radiation that can be highly targeted to the tumor, sparing the normal tissue around it – was a viable option for this group of patients. SBRT provides a higher dose of radiation, meaning patients have fewer treatments. In this case, treatment averaged two weeks.

The study included 20 patients with a median age of 83, all of whom were medically unable to tolerate surgery or combined chemo-radiation therapy. The majority of patients in the study (90 percent) received SBRT treatment at the time of diagnosis.

Seven patients reported side-effects from treatment: nausea, vomiting and fatigue.
Among the patients: 13 had a recurrence of cancer; nine had cancer spread from the original tumor to distant organs or distant lymph nodes.

Median overall survival was 6.7 months, and median recurrence-free survival was 8.1 months. At six months post-treatment, 61 percent of patients were alive; two patients in the study survived nearly two years.

"National trends tell us that very few patients over the age of 75 are getting any treatment at all for pancreatic cancer due to comorbidity risks," notes Dr. Yechieli. "So we want to push the envelope to give them a treatment option that, while not a cure, is short, effective and safe, and has the potential to give them a good quality of life."

The next step in this research, Dr. Yechieli says, is to closely follow patients after SBRT and get their direct feedback to measure post-treatment quality of life.

Provided by Henry Ford Health System


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