Chemo first: A new regimen for pancreatic cancer

More than six and a half years ago, A. Wilson Jones of Salisbury, N.H., was diagnosed with pancreatic cancer. It’s a kind of cancer that is almost always lethal; just 6% of patients are still living five years after diagnosis. But Jones, now 76, is thriving; he visits pancreatic cancer support groups to show other patients that long-term survival is more than a faint hope. It can be done.


A significant element of Jones’s cure involved some deceptively simple changes in the usual treatment pattern. The new regimen was developed by an oncology team at DHMC’s Norris Cotton Cancer Center, and the results were published in the December issue of the journal *Annals of Surgical Oncology*. And Dr. Sarah Greer, a surgery resident, gave a prize-winning presentation on the process at a recent New England Surgical Society meeting.

Any progress against this particularly deadly and painful disease is significant. In the U.S., it’s the fourth-leading cause of cancer deaths in men and the fifth in women. The National Cancer Institute reckons that 32,180 people (one in 10,000) will be diagnosed with the disease during 2005 and that 31,800 will die of it.

Tucked between the stomach and the spleen, the pancreas produces fluids that aid in digestion. When it becomes cancerous, the most effective treatment is removing the tumor, as well as part of the stomach and other nearby tissues—a process known as a resection.

“If we can get the tumor out, that’s a real advantage,” says Dr. J. Marc Pipas, an oncologist at DHMC. But that’s not easy. Pancreatic cancer presents symptoms that aren’t easily detected, which means it is often quite advanced by the time it is diagnosed. In addition, as the pancreatic tumor grows, it begins to affect blood vessels and other body parts—making surgery particularly difficult. The tumor also tends to spread quickly, releasing microscopic copies of itself into the bloodstream. Once this metastasis takes place, the opportunity for a successful surgery declines sharply.

The typical treatment for pancreatic cancer has involved treatment with chemotherapy and radiation after surgery, in an effort to destroy any remaining disease. Too low: But surgical oncologist Thomas Colacchio, M.D., who is also president of the Dartmouth-Hitchcock Clinic, said at a 1996 meeting of the Norris Cotton tumor board that the survival rate for pancreatic cancer was far too low. He challenged the oncologists to find a treatment that would be more effective at prolonging the lives of more patients.

So the oncology team reversed the traditional sequence—giving 24 patients chemotherapy and radiation in advance of surgery. In another innovation, the chemotherapy was delivered in higher doses over a shorter, three-week period. This sequence actually shrinks the pancreatic tumor and appears to destroy the bits of disease that have metastasized. The surgical members of the team then found that it was easier to completely remove the pancreatic tumor.

“We’re optimistic that this technique may be successful,” says Pipas. The outlook for a pancreatic cancer patient is, he says, “still pretty bleak, but we can make more people respond to surgical resectioning.”

Wilson Jones ended up as one of the 24 patients after he went to his family doctor in New London, N.H., complaining of stomach pain. When a CT scan revealed a pancreatic tumor, Jones was transferred to DHMC, where he was treated with radiation and high doses of the chemotherapy agents gemcitabine and docetaxel. He was in the hospital for 11 days.

“The chemo really nailed me,” recalls Jones, noting that the treatments made him weak and dehydrated. But the chemotherapy and radiation “nailed” his tumor as well, so the surgeons went to work. “The operation took 13, 14 hours,” Jones says. “Two surgeons had to work on me.”

For the patients who underwent this experimental protocol, the technique succeeded. The tumors of about half of the subjects decreased by at least one-third—one of the highest response rates ever seen in the treatment of pancreatic cancer. In the case of one patient, in whom the disease had progressed too far for surgeons to operate, scans indicated that the cancer was wiped out by the protocol.

Surgery: The surgeons were able to operate on 17 of the 24 patients who took part in the study. Among them were nine whose cancer had previously been ruled inoperable or borderline operable, Pipas says. So far, the cancer has not returned in patients who had surgery.

“Before I got cancer,” Jones observes, “I had always said I didn’t want to go through chemotherapy and radiation. But you think differently when the shoe’s on the other foot.”

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