

New York doctors testing heated chemo for rare cancer

March 5 2009, By Delthia Ricks

Long Island cancer doctors have borrowed a page from medicine's past to write a new chapter on how to address a rare malignancy by infusing heated chemotherapy directly into the abdomen using a heart-lung machine.

The treatment is being tested at Stony Brook University Medical Center as a therapy for cancer of the appendix, a malignancy so rare it is known as an orphan cancer. The American Cancer Society has no statistics on its prevalence.

Dr. Colette Pameijer, a Stony Brook cancer surgeon and researcher, is treating appendiceal cancer with heated chemotherapy in what she interchangeably calls a "chemo bath" or, more technically, intraperitoneal hyperthermic chemoperfusion.

By warming the cancer drug, mitomycin, to about 107 degrees, it becomes a heated anti-cancer weapon when pumped through a catheter directly into the abdomen after surgery. The chemo bath is performed only once.

"We believe that in addition to the chemotherapy, the heat is directly toxic to the tumor cells," Pameijer said. She added the concept of a chemo bath for cancer of the appendix was first broached about 20 years ago by Dr. Paul Sugarbaker, a Washington cancer specialist and theorist who had researched new ways to approach appendiceal cancer, which can be resistant to chemotherapy.

He found when chemo is heated, its warmth zeros in on a key vulnerability of cancer cells -- they can't stand heat. Weakening the cancer with heat helps make the drug dramatically more effective.

Yet when Sugarbaker first advanced the notion of heat-treating cancer, he was met with a torrent of criticism from the medical establishment.

Pameijer said the therapy is not approved by the U.S. Food and Drug Administration, but she hopes to advance her work in the next two years to a formal nationwide clinical trial. "Not many people have it (appendiceal cancer) so it is difficult to do clinical trials," she said.

"With appendiceal cancer there isn't much funding so, yes, you do have to be a maverick," she said of taking bold steps in treatment strategies.

Cancer of the appendix, however, is not the only one short on research funding, experts say. Pancreatic cancer is another orphan malignancy for which there is little research funding, explained Kerry Kaplan, executive director of the Lustgarten Foundation for Pancreatic Cancer Research in Bethpage, N.Y. She, too, said people with common cancers have more political power as a group and can place more pressure on legislators for funding.

Dorothy Goncalves of Staten Island learned about Pameijer's chemo bath technique through her son and nephew, who are physicians. "I knew I had to have this," she said, adding there were few other treatments.

She said she had the treatment in September and all tests since that time have shown her to be cancer-free. "I just had a PET scan and CT scan and I am clean, no cancer at all."

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Citation: New York doctors testing heated chemo for rare cancer (2009, March 5) retrieved 4 May 2024 from <https://medicalxpress.com/news/2009-03-york-doctors-chemo-rare-cancer.html>

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