Chemobath for Colon Cancer Evaluated at UC San Diego Moores Cancer Center

June 09, 2011 |

As part of a multicenter clinical trial, surgical oncologists at UC San Diego Moores Cancer Center are comparing the effectiveness of standard chemotherapy to a tri-modality approach to halt advanced colon cancers. The objective is to determine if there is a difference in survival rates between patients who receive intravenous (IV) anti-cancer drugs or a combination of IV drugs in addition to surgery and a procedure called hyperthermic intraperitoneal chemotherapy, more commonly known as HIPEC or "chemobath."

Debbie Soldano, RN, BSN, OCN and Andrew Lowy, MD

"This will be the most comprehensive study to date to examine an aggressive approach to treating colon cancers that have spread to the abdominal lining," said Andrew Lowy, MD, chief of surgical oncology at Moores Cancer Center. "The study will also compare quality of life, cancer progression by cell subtype, toxicity levels and the reaction of the tumor cells to intervention."

The 5-year research study, funded by the National Cancer Institute, will recruit 360 colon cancer patients. Based on significant experience with the chemobath, Moores Cancer Center was selected as one of only 10 national sites to initially enroll patients. In this randomized trial, all patients will receive the best available drugs; however, one group will also undergo surgery combined with both direct- and IV-drug delivery. When treated with chemotherapy alone, patients with peritoneal metastases have an average life expectancy of 12 to15 months.

"Colorectal cancer that has spread to the abdominal surface is extremely difficult to eradicate with surgery alone," said Lowy. "A tiny tumor hidden in the anatomy or just a few remaining cancer cells can later spread to other areas. We hope to show that optimal treatment must be not only immediate but multidisciplinary."

The surgical arm of the clinical trial consists of two parts. In the first part, called cytoreductive surgery, surgeons inspect the entire abdominal cavity to remove all visible signs of malignancy.

Once all suspicious growths are removed, the patient is prepared for the HIPEC or chemobath.

During the chemobath, drugs are circulated throughout the abdomen via catheters that form a circuit. The fluid containing the chemotherapy is continuously heated to 106 to107 degrees and washed over the internal organs. After 90 minutes, the solution is removed. The exposure of the tumor cell to the drug can be as much as 75-fold that which can be administered intravenously.

Traditionally, patients are administered chemotherapy by IV, but this approach is ineffective in obliterating tumors that are unattached to the bloodstream because the drug cannot reach the tumor cells. With the chemobath, the heated chemotherapy drug is poured directly into the abdomen. The combination of direct contact and heat make the tumor cells more susceptible to chemotherapy.

According to Lowy, while this approach is logical and its efficacy has been suggested by many small studies, its widespread adoption as a standard therapy requires testing in a study where patients are randomized to receive the current standard (IV chemotherapy only) or the proposed new standard (IV chemotherapy + surgery + HIPEC).

Patients who are enrolled to the IV chemotherapy arm may receive surgery and HIPEC if their disease is not responsive to their chemotherapy treatment.

Eligible patients include males and females 18 years old or older with newly diagnosed and previously untreated colon adenocarcinoma with disease limited to the peritoneal surfaces. For more information on this clinical trial, please call Debbie Soldano, RN, BSN, OCN at 858-822-6243.

# # #

Media Contact: Jackie Carr, 619-543-6163, jcarr@ucsd.edu

Related Specialties

Colorectal Cancer
Surgical Oncology

Share This Article

Related News

Massive Study Links Nearly 600 Genomic Regions to Self-Regulating Behaviors
8/26/2021

Brain Organoids Mimic Head Size Changes Associated with Type of Autism
8/25/2021

State Stem Cell Agency Funds Three New UC San Diego Projects
8/25/2021

Two Studies Seek to Go Beyond the GIST of Intestinal Tract Cancer
8/24/2021

View All News >

Follow Us

Follow @ucsdhealth