Medical Xpress

Drug combination may be effective against deadly melanoma, pilot study shows

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By targeting and disabling a protein frequently found in melanoma tumors, doctors may be able to make the cancer more vulnerable to chemotherapy, according to early results of a clinical study conducted by researchers in the Duke Comprehensive Cancer Center.

"In this pilot study, we gave patients with advanced extremity melanoma a compound that had been shown in pre-clinical studies to weaken melanoma tumors by targeting a protein expressed on the surface of the cancer cells. When chemotherapy was then given by infusion, it was much more effective compared to chemotherapy given alone," said Douglas Tyler, M.D., a surgeon at Duke and the Durham Veterans Affairs Medical Center, and senior investigator on this study. "Not only was the treatment well tolerated but a surprising number of this small group of patients had their tumors completely disappear."

The researchers discussed their findings in an oral presentation on March 6, 2009 at the Society of Surgical Oncology annual meeting, and results of the study have been accepted for publication in the journal *Cancer*. The study was funded by Adherex Technologies, the company developing the compound that was tested in combination with chemotherapy, the United States Department of Veterans Affairs, the Duke Institute for Genome Sciences & Policy, and the Duke Comprehensive Cancer Center.

Data from 16 patients treated at Duke and the University of Texas MD Anderson Cancer Center were examined for this study. Half of them

experienced a complete response - or an obliteration of cancer - as a result of treatment, Tyler said. The compound - called ADH-1 - was delivered intravenously and the chemotherapy given under surgical conditions, through the artery and vein in the affected limbs.

Melanoma often affects people on their extremities, with a common scenario being a mole that appears on the foot and then spreads up the leg. Up to ten percent of patients with extremity melanoma develop multiple recurrences in the extremity that cannot be treated with surgery alone.

"These early results are very exciting because metastatic melanoma is one of the most deadly cancers and one which is typically very unresponsive to therapy," said Georgia Beasley, M.D., a surgical resident at Duke and lead author on this study. "The next step will be to continue testing the efficacy of this treatment in more patients, here and at other centers."

A larger phase II trial involving 46 patients with advanced extremity melanoma, using the same combination of drugs, was designed to try and better define the response rate in this population, Tyler said. This trial has recently completed recruiting patients and data will be forthcoming, he said.

The incidence of malignant melanoma is increasing at a rate faster than any other cancer, with 60,000 new cases expected to be diagnosed this year in the United States. Melanoma that has spread beyond the primary site is rarely curable, and treatment options are limited.

Source: Duke University Medical Center