Combination therapy packs 1-2 punch against melanoma

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Disabling a protein frequently found in melanoma tumors may make the cancer more vulnerable to chemotherapy, according to a pilot study led by researchers in the Duke Comprehensive Cancer Center.

“We tested a compound that can weaken the tumor by targeting a protein found on the surface of a melanoma cell," said Douglas Tyler, M.D., a surgeon at Duke and the Durham Veterans Affairs Medical Center, and senior investigator on this study. "When chemotherapy was applied to the tumor in this weakened state it was much more effective compared to conventional therapy alone.,”

The researchers presented their findings June 1 in a poster discussion session at the American Society of Clinical Oncology annual meeting in Chicago. The study was funded by Adherex Technologies, the company developing the compound that was tested in combination with chemotherapy.

Sixteen patients received the therapy as part of this study. All had been diagnosed with regionally advanced, in-transit melanoma, characterized by cancerous growths that appear and spread mainly on the limbs. This type of melanoma is often treated with regional chemotherapy, where veins and arteries are accessed in the affected area and large doses of chemotherapy are pumped directly into the body. The patients on this study received a drug known as ADH-1 both before and after chemotherapy; ADH-1 makes it difficult for cells to properly bind to one another.

“Eight of the patients on the study had complete responses to therapy, meaning their tumors completely disappeared,” said Georgia Beasley, M.D., a medical student at Duke and lead investigator on the study. “This is very encouraging and we look forward to continuing this study and then eventually moving on to a Phase III trial.”

Regional infusion of chemotherapy for melanoma is given under surgical conditions. Without ADH-1, patients generally have complete responses about 25 to 35 percent of the time.

“Compared to some previous data, we have been able to double the number of complete responders to therapy by adding the ADH-1, so that’s extremely promising,” Beasley said.

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.

“These early results really speak to the importance of developing combination therapies,” Beasley said. “Earlier animal results showed that using ADH-1 alone was not an effective treatment, but in combination with chemotherapy the results, both pre-clinically and clinically, have been very exciting.”

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; even when it is treated, the response rates are typically poor and most people die within six to nine months.

Source: Duke University