New Cancer Vaccine Fights Tumors Throughout the Body

In a small clinical trial, the vaccine trained the immune system to recognize tumors and attack them in people with lymphoma.

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Damon Runyon Clinical Investigator Joshua Brody, MD, of the Icahn School of Medicine at Mount Sinai, and colleagues report promising results in a small lymphoma clinical trial testing a new cancer vaccine. Tumors shrunk in many patients and three of the 11 participants went into remission. In those three, the combination treatment also reduced other malignant tumors throughout their bodies. The vaccine, which is not preventive, trains the immune system to recognize tumors and attack them. Researchers first injected cancerous masses with a drug to recruit immune dendritic cells to the tumor, and then treated the tumors with a low dose of radiation, along with a stimulant to activate immune cells. This “in situ” combination instructed other immune cells called T cells to kill cancerous cells throughout the body, while sparing non-cancerous cells.

“The in situ vaccine approach has broad implications for multiple types of cancer,” says Brody. The results have warranted larger trials for lymphoma, breast, and head and neck cancer patients, which already opened to test the vaccine in combination with checkpoint blockade drugs, another form of immunotherapy.

Read more on Medical Xpress.

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