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Two targeted therapies likely better than one in patients with aggressive lymphoma

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When combined with a cocktail of chemotherapy drugs, two monoclonal antibodies, instead of one, appear to offer superior results in patients with diffuse large B-cell lymphoma, according to Mayo Clinic researchers working with the North Central Cancer Treatment Group (NCCTG).

At the annual meeting of the American Society of Clinical Oncology (ASCO), researchers say that adding the targeted therapy epratuzumab to a regimen known as R-CHOP resulted in an overall 12-month survival of 88 percent in 78 patients. While they call that a very good outcome, the researchers were especially encouraged because the survival rate was 85 percent in patients with high-risk disease.

"These results are very good and very promising, and hopefully will be an important advance over treatment now being offered to patients with this cancer," says the study's lead author, Ivana Micallef, M.D., a Mayo Clinic hematologist. "But we cannot yet say that is so, since the two different regimens haven't been tested head to head."

"Still, we are eager to do a randomized, phase III study because when we compare our results to some other studies of R-CHOP, our findings do look better," she says. In general, those studies showed a 12-month progression-free survival (PFS) of 67 to 79 percent.

The NCCTG multi-institutional research network is planning a clinical trial that will randomize patients with high-risk diffuse large B-cell

lymphoma to either this regimen, known as ER-CHOP, or to R-CHOP, the standard treatment. R-CHOP includes a combination of chemotherapy drugs (cyclophosphamide, doxorubicin, and vincristine), the steroid drug prednisone, and rituximab, a monoclonal antibody.

Diffuse large B-cell lymphoma is one of the most common and aggressive forms of non-Hodgkin lymphoma, a cancer of the B-lymphocyte white blood cells.

The researchers are the first to study the addition of epratuzumab to R-CHOP in newly diagnosed, untreated patients. Both epratuzumab and rituximab are monoclonal antibodies that attach to proteins commonly found on the outside surface of B cells — CD20 for rituximab and CD22 for epratuzumab. They are also used as immunosuppressive agents to treat certain autoimmune diseases where B cells produce antibodies that attack a person's own cells. "These drugs are designed to shut down B cells, whether they are involved in autoimmunity or are malignant," Dr. Micallef says.

Rituximab is approved for use by the Food and Drug Administration, while epratuzumab is not. That means ER-CHOP treatment cannot be used outside of a clinical trial.

In addition to the results on overall survival, the researchers found an 82 percent progression-free survival in the group. The 39 high-risk patients had a 77 percent PFS, and, for the 39 low-risk patients, PFS was 88 percent. Patients are deemed high risk if they have three or more poor prognostic factors, such as age (60 years or older), elevated LDH (a blood test), advanced disease stage, disease outside of lymph nodes and poor physical performance status.

Dr. Micallef says that the treatment, which is given every 21 days, was well tolerated by patients.

Source: Mayo Clinic (news : web)