Chronic lymphocytic leukaemia sufferers get bigger lease on life

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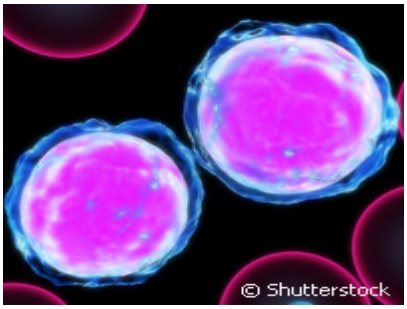

A European team of researchers has discovered that adding the monoclonal antibody Rituxan to standard chemotherapy treatment for chronic lymphocytic leukemia (CLL) patients could raise their 3-year survival rate from 45 to 65%. The scientists hope their finding will help revolutionise first-line standard treatment practice for these patients, even if no permanent cure is ever found. The research was recently published in the Cancer Special Issue of The Lancet journal.

CLL is a stage of small lymphocytic lymphoma (SLL), a type of B-cell lymphoma found primarily in the lymph nodes. It is the most common adult lymphoid malignant disease in western countries and affects about 5 in 100,000 people every year. For more than 40 years, chemotherapy has been used to treat CLL, but with limited success, and there is currently no treatment available that improves overall survival.

But the researchers say they achieved promising results in phase two studies, combining rituximab with the chemotherapy drugs fludarabine and cyclophosphamide. They reported the highest response rates so far for first-line treatments in patients with CLL.

To further evaluate this therapeutic strategy, the German Chronic Lymphocytic Leukaemia Study Group carried out a phase 3 trial in 190 centres in 11 countries. Over 400 previously untreated patients were randomly assigned to receive chemoimmunotherapy with fludarabine, cyclophosphamide, and rituximab, and

another 400 to receive chemotherapy with fludarabine and cyclophosphamide.

The scientists found that almost half of the patients in the chemoimmunotherapy group achieved complete remission after 3 years compared to less than 25% in the chemotherapy group. After three years of treatment, 65% of chemoimmunotherapy patients had no disease progression compared to 45% of patients who received chemotherapy. Treatment with chemoimmunotherapy significantly increased the likelihood of patients surviving for three years or more, the researchers said. They noted that after 3 years, 87% of patients who had received chemoimmunotherapy were alive compared with 83% who had received chemotherapy alone.

Grade three and four neutropenia and leucocytopenia (condition in which the number of white blood cells in the blood stream is decreased) were more common in the chemoimmunotherapy group, according to the team. However, they said no other side-effects were increased by chemoimmunotherapy treatment. There were 8 treatment-related deaths in the chemoimmunotherapy group compared with 10 in the chemotherapy group.

The scientists pointed out that improvement in survival was not uniform across all clinical and genetic subgroups. Patients with chromosome 17p deletion (or p53 dysfunctional CLL), in particular, had a poor response to the treatment, with fewer than 5% achieving complete remission even with chemoimmunotherapy treatment. However, the rate of complete remission increased by more than three times with chemoimmunotherapy in patients with chromosome 11q deletion, a group considered to have a poor prognosis.

The authors concluded that the 'these results might help establish a new treatment model in which the choice of a specific first-line treatment improves the natural course of chronic lymphocytic leukaemia'. Peter Hillmen from St James's University Teaching Hospital, Leeds in the UK, said the trial was 'a landmark for the treatment of CLL in several ways and heralded fundamental changes in the management of the disease'.

Researchers from the Austria, Australia, the Czech Republic, Germany, Italy and and Switzerland contributed to the study.

Countries

Austria, Australia, Switzerland, Czechia, Germany, Italy, United Kingdom

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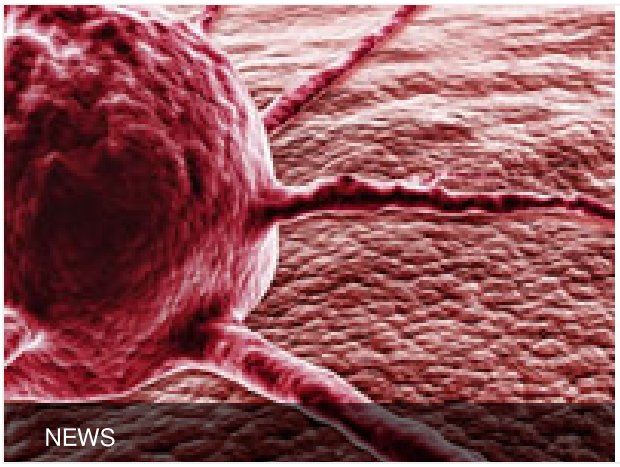

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