

HAEMATOLOGICAL CANCER NEW STANDARD OF CARE?

Primary mediastinal B-cell lymphoma is a rare cancer—only 10% of diffuse large B-cell lymphomas are of this subtype—in which no treatment standard has been established. Unfortunately, in most patients, immunochemotherapy is not curative, and consolidation radiotherapy is offered. As this treatment is associated with a range of late effects, researchers led by Wyndham Wilson have been looking into new systemic regimens that might enable the sparing of radiotherapy. Now, they report that a combination of chemotherapy (etoposide, doxorubicin, cyclophosphamide, vincristine and prednisone [EPOCH]) and the anti-CD20 monoclonal antibody rituximab obviates the need for radiotherapy in these patients.

“We began to develop EPOCH-based treatment in 1990, first in the salvage setting and then upfront,” Wilson explains, “EPOCH differed from other regimens in both its inception, based on the science of pharmacokinetics and optimization of scheduling, and eventually in the use of infusions followed by cyclophosphamide.” The approval of rituximab allowed its inclusion in a dose-adjusted EPOCH and filgrastim regimen, which was assessed in this phase II, single-group prospective study in 51 patients with untreated primary mediastinal B-cell lymphoma.

Although this trial is limited by its single-arm nature, the results it generated are impressive. After 5 years of follow up, the overall survival rate was 97%, and the event-free survival was 93%. Wilson points out that “even with R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine and prednisone) and radiation, the reported cure rates are around 80%, so dose-adjusted EPOCH-R without radiation not only obviates the need for radiation, but has significantly improved the cure rate of this disease.”

The results obtained in the 51 prospectively analysed patients were supported by a retrospective assessment of 16 patients who were treated with this regimen at a different centre. After 3 years, these patients had a 100% event-free survival rate.

As a result of these data, “dose adjusted EPOCH-R, in my view, should be considered the current standard as there was no standard before,” says Wilson.

Rebecca Kirk

Original article Dunleavy, K. *et al.* Dose-adjusted EPOCH-rituximab therapy in primary mediastinal B-cell lymphoma. *N. Engl. J. Med.* 368, 1408–1416 (2013)