

SUMMARY

The administration of rituximab in combination with the CHOP-21 treatment is currently the “new gold standard” in the treatment of diffuse large B-cell lymphoma (DLBCL). This treatment was a relevant breakthrough in the treatment of the disease. However, treatment of very old patients excluded from clinical studies, with poor performance status and severe accompanying illnesses is invariably a serious concern. Regarding dose-dense R-CHOP-14 treatment in DLBCL the views of professionals are divided. It seems that this treatment is efficient in decreasing primary resistancy; however, its adverse-event profile is less favourable. In primary mediastinal lymphoma (PMBCL) the R-CHOP-21 treatment also proved to be effective. However in PMBCL, where patients are usually 30 years younger than in DLBCL this meant only moderate improvement. We investigated the clinical effectivity of standard and dose-dense immunochemotherapy in DLBCL and PMBCL in this retrospective study:

- First retrospective comparison in Hungary of the treatment efficacy and the effects on survival parameters of R-CHOP-21 treatment in DLBCL patients with the historical control group treated previously with CHOP-21 in the same centre and with international literature data.
- The author have compared the results, the treatment efficacy and effects on survival parameters of intensive R-CHOP-14 treatment in young DLBCL patients with the results of those patients who received R-CHOP-21 treatment, as mentioned above.
- Comparison of results of pre-immunochemotherapy era and results of the standard immunochemotherapy, the R-CHOP-21 treatment in the rare PMBCL patient group.
- Assessment of results and comparison of standard R-CHOP-21 and dose-dens R-CHOP-14 treatments in PMBCL patients.

We found that treatment results with R-CHOP-21 treatment in our patients are similar to the data published in the international literature. Our results with the dose-dense R-CHOP-14 treatment are very favourable. The exact role of dose-dense and dose intensive treatments in DLBCL will only be set after completion of current prospective randomised clinical studies with high number of cases.

NEW RESULTS

- The effect of R-CHOP-21 treatment has been investigated for the first time in Hungary in such a large number of DLBCL patients. Our results were comparable with the data in the international literature.
- We compared the efficacy of R-CHOP-21 and CHOP-21 treatments in DLBCL patients and found that the immunochemotherapy was more effective in almost all analysed parameters compared to the previously standard CHOP-21.
- In a smaller, less favourable prognostic group of DLBCL patients we examined the results of dose-dense R-CHOP-14 treatment for the first time in Hungary. The international literature data on dose-dense treatment are contradictory. Our results were favourable and we found that the R-CHOP-14 treatment was more effective than R-CHOP-21 in DLBCL.
- The efficacy of R-CHOP-21 treatment in PMBCL patients was also investigated for the first time in Hungary. We found this treatment as effective as the previous third generation treatments, but with less toxic side effects.
- We also studied the efficacy of dose-dense R-CHOP-14 treatment in PMBCL for the first time in Hungary and among the first in the world. Our results were also comparable to the international data. The efficacy of the R-CHOP-14 treatment is superior to the R-CHOP-21 regimen and similar to other, dose-intensive treatments, such as DA-EPOCH-R or R-VACOP-B. We consider the R-CHOP-14, which is an easily manageable treatment with relatively few side-effects in young patients as an optimal treatment for PMBCL.

Introduction of immunotherapy resulted in a breakthrough of DLBCL, which is confirmed by our results as well. We found that dose-dense R-CHOP-14 was more effective than R-CHOP-21. The international literature data is contradictory regarding study results of dose-dense and dose-intensive treatments. Further prospective, randomised multicentric studies are necessary to select those patient groups for whom the more intensive treatment would result in significantly better survival outcomes.

In treatment of PMBCL it seems that dose-dense or dose-intensive treatments indicate a further survival benefit without increase in toxicity. The necessity of additional radiotherapy still has to be clarified. These questions can only be answered by prospective randomized multicentric studies.