Radiolabeled Immunotherapy in Non-Hodgkin’s Lymphoma: The Perception in Clinical Oncology Needs Further Attention

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EDITORIAL

Internal radio-immunotherapy (RIT) has achieved fundamental clinical successes in the past. Its commercial availability is, however, poor. Only few, as e.g. ⁹⁰⁰⁻ibritumomab tiuxetan (Zevalin), have gone to market but still pose a number of challenges since many years, the main one being health economics. In an article published in the New York Times of 14 July 2007, entitled ‘Market Forces Cited in Lymphoma Drugs’ Disuse’, this dilemma of innovation and health politics is presented by three embarrassing case studies of patients having late-stage Non-Hodgkin’s lymphoma (NHL): All three recovered after a single dose of Bexxar or Zevalin, and all three were in the prestigious role to receive these treatment options at all, as, at that time, in the United States these options were used little by physicians due to the unacceptable reimbursement situation.

From a cost-effectiveness point of view, this is not understandable, since, already a year before, in 2006, data for Zevalin provided convincing support in favour of its added value in terms of cost per month in remission or cost per disease-free month despite higher initial product acquisition costs.

Even more, in a recent state-of-the-art seminar on NHL, published in one of the premier journals, The Lancet, Shankland and colleagues discussed advances in the understanding of the biology and new, available therapy regimens for this indication. In their comprehensive review they indeed briefly described radiolabeled immunotherapy (RIT) options, such as ⁹⁰⁰⁻⁻ibritumomab tiuxetan for the treatment of follicular lymphoma. However, other indications of this new RIT approach are not mentioned in this article, although there are also several entities that have been evaluated with convincing results for this new treatment approach, interesting and important enough to mention for patients and treating physicians: e.g., indolent and aggressive NHL, relapsed diffuse large B-cell lymphoma, mantle cell lymphoma, multiple myeloma, primary central nervous system lymphoma, Hodgkin’s lymphoma, marginal zone lymphoma, or Richter syndrome (for a detailed review, see, e.g., Zevalin can not only be used as add-on treatment, but can also be considered alone in first-line treatment of follicular NHL.

RIT with ⁹⁰⁰⁻⁻ibritumomab tiuxetan offers a lot of advantages to patients if compared to older chemotherapy combinations: The easy clinical setting with only two sessions within a week, no need for preliminary diagnostic imaging to estimate dose prior to treatment, and, last but not least, several quality-of-life advantages (no hair loss, to mention only one).

Today, 2018, the RIT alternative to common chemotherapy regimens in NHL seems still not present in clinical practice.

To conclude, the perception of RIT in NHL, as we think, still needs further attention as it is a valuable aid or even alternative to conventional chemotherapy schemes in NHL. In addition to its efficacy there is also convincing data on cost-effectiveness. Therefore, the perception of RIT in clinical oncology should be updated. This could work if the partners, oncologists, nuclear medicine physicians, and health economists take up the discussion – together, not separately, and as peers.

REFERENCES


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