CORRESPONDENCE

Allogeneic Stem Cell Transplantation in Acute Myeloid Leukemia

Establishment of Indications on the Basis of Individual Risk Stratification
by Prof. Dr. med. Dr. h. c. Axel R. Zander et al. in volume 39/2008

Statement Was Not Sufficiently Supported

Zander et al. conclude in their article that in patients with acute myeloid leukemia who are in second remission the result of transplantation from unrelated donors are "equivalent" to those from sibling donors. This statement is not supported by the literature cited by Zander et al. The publication cited in support (1) does not mention any comparison of related and unrelated donors. The article is an evaluation of a registry of patients with promyelocytic leukemia who had either received autologous transplants or a transplant from an HLA identical sibling donor. It does thus not contradict our conclusion (2) in the IQWiG (Institute for Quality and Efficiency in Health Care-Home) report. The most suitable instruments for comparing therapeutic alternatives are prospective, controlled studies that ensure identical structures. "Genetically randomized" studies have shown that studies that are fairly close approximations of this design are possible even in stem cell transplantation. One such study was conducted, for example, which compared transplantation with dose reduced conditioning versus chemotherapy (3). The study showed a clear advantage of dose-reduced conditioning in leukemia-free survival. In addition to many other studies of a similar design, it confirmed our approach (2) that it is entirely possible to evaluate stem cell transplantation in a methodologically valid manner and with relevance to health care delivery.

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IQWiG has compiled a report on the subject.

In Reply:

Herrmann-Frank et al. doubt that transplantation of HLA identical unrelated donors is equivalent to sibling donor transplantation. Since for most AML patients no HLA identical related donor is available, but an HLA identical unrelated donor may be found, this is indeed important. The study by Mohty et al that is cited by Herrmann-Frank, on the comparison of dose reduced conditioning if a HLA identical family donor is available with standard or high dose chemotherapy if none is available shows unequivocally the superiority of family donor transplantation vis-à-vis other, non-transplantation, strategies in AML. Several larger studies confirmed the equivalence of HLA identical unrelated donor transplantation versus family donor transplantation in AML. An analysis of HLA identical unrelated donor transplantation versus family donor transplantation, which included 175 AML patients, cytomegaly serostatus and a severe donor-host reaction were relevant for survival, whereas the type of transplantation was not (1). Comparing the results of HLA compatible unrelated donor and family donor transplantations in 368 AML patients in a study showed that the donor type was not a significant prognostic factor for survival after allogeneic stem cell transplantation in older patients with standard and high risk AML (2). Patients with AML who would benefit from allogeneic stem cell transplantation but who have no family donor should therefore receive a transplant from an unrelated donor. Further evaluation of both transplantation methods is, however, desirable.

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Conflict of interest statement

The authors of both the letter and the reply declare that no conflict of interest exists according to the guidelines of the International Committee of Medical Journal Editors.