

Reduced-intensity Allogeneic Transplant in Hodgkin Lymphoma

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Hello. My name is Robert Chen. I am an assistant professor at the City of Hope Medical Center. I am reporting live from the 12th ICML Meeting in Lugano, Switzerland. Today, I want to speak to you about reduced-intensity allogeneic transplant in Hodgkin lymphoma. My research is titled, "Brentuximab vedotin enables successful reduced-intensity allogeneic transplant in relapsed/refractory Hodgkin lymphoma." Salvage chemotherapy plus autologous stem cell transplant can cure about 50% of patients with relapsed Hodgkin lymphoma. Unfortunately, for the other 50% of the patients, their treatment options are limited to the palliative care. Reduced-intensity allogeneic transplant has been used in this setting. However, due to the lack of disease control prior to transplant, its efficacy has been low. The progression-free survival at 2 years has been reported from 22% to 32%, and that is a pretty low number. Brentuximab vedotin is a new antibody drug conjugate that was FDA approved in 2011. It has an overall response rate of 73% and CR rate of 32%. We looked at how this agent can help reduced-intensity allotransplant in this setting. My research was a collaboration between City of Hope and Fred Hutchison Cancer Center. It was a retrospective analysis of consecutive patients with relapsed/refractory Hodgkin lymphoma treated with brentuximab vedotin and then went on to receive a reduced-intensity allotransplant from 2008 to 2011. We want to look at the efficacy and toxicity of reduced-intensity allogeneic transplant following brentuximab vedotin. The eligibility criteria for our study was simple. The patient had to be 18 or greater. They had to have received brentuximab vedotin. They had to have relapsed/refractory Hodgkin lymphoma. They also had to have a normal organ function adequate for a transplant and also have donors available. Out of total of 19 patients, 15 were treated at City of Hope and 4 were treated at Fred Hutchison. Eighteen of them had received prior autologous stem cell transplant. The median number of prior regimens was 5. Seven patients had received a match-related transplant, 9 had a match-unrelated, and 3 patients received a haploidentical transplant. The majority of the patients received fludarabine and melphalan as a conditioning regimen. Three patients received fludarabine, Cytoxan, and TBI as a conditioning regimen. About 80% of the patients were transplanted in CR or PR. With a median follow up of about 25 months, our 2-year overall survival was about 80%, and a 2-year PFS was about 60%. The non-relapse mortality was 12%. When we separated the groups into patient transplant in CR versus patient transplant not in CR, the 2-year PFS was 72%

for patients in CR versus 54% for patients not in CR. The *P*-value was not significant because of our low number of patients. With respect to engraftment, the median number of days to engraftment of white blood cell was 14 days and median number of days to engraft platelets was 14 days as well. There was no mortality at day-100 mark, also no graft failures. About 25% of patients had developed acute GVHD, and 75% of the patients had developed chronic GVHD. These numbers are very similar to the numbers with our traditional allogeneic transplant method.

In conclusion, our study does show that brentuximab vedotin enables successful reduced-intensity allotransplant in relapsed and refractory Hodgkin lymphoma.

Thank you for joining me for this session reported to you live from the 12th ICML meeting. Please be sure to view the other highlights from this meeting. Thank you.

References

Chen R, et al. [Two-year Followup of Patients with Relapsed/refractory Hodgkin Treated with Brentuximab Vedotin Prior to Reduced Intensity Allogeneic Hematopoietic Cell Transplantation](#). Special Issue: 12th International Conference on Malignant Lymphoma, Palazzo dei Congressi, Lugano, Switzerland. *Hematological Oncology*. 2013;31(S1):143 (abstract 140).

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