



Allo Transplant Helps Some Patients with Mantle Cell Lymphoma when Chemotherapy and Radiation Don't

Important Points:

- 25% of patients with mantle cell lymphoma went into remission after an allo transplant when chemotherapy and radiation alone didn't work.
- Patients can do just as well after transplant with a low dose of chemotherapy and radiation as they would with a high dose.
- Patients have fewer serious side effects from a low dose of chemotherapy and radiation.

Mantle cell lymphoma (MCL) is a rare type of non-Hodgkin lymphoma. Doctors often use a high dose of chemotherapy, and sometimes radiation, to treat patients with MCL. However, this treatment doesn't always work. Even when it does work, the disease often comes back. Also, high doses of chemotherapy and radiation can have serious side effects.

When the disease comes back or doesn't respond to treatment, doctors have a few options. One option is for the patient to get an allogeneic hematopoietic cell transplant (allo transplant). To prepare for an allo transplant, patients must first get chemotherapy, and sometimes radiation, again. This destroys the unhealthy blood cells in the patient's body. Then, doctors put in healthy blood cells from a donor.

Older studies show that an allo transplant might help patients who don't get better after getting only chemotherapy and radiation. However, these studies looked at fewer than 20 patients. Researchers and doctors feel more confident about study results when they include a lot of patients.

This new study included 202 patients. All of the patients had MCL and got chemotherapy / radiation, but the disease came back. The study looked at how well the patients did after an allo transplant. It also looked at the amount of chemotherapy and radiation patients got before their transplant to see what worked better to treat the disease. Some patients got low doses of chemotherapy and radiation while others got high doses.

The study results were hopeful. 25% (1 out of 4) of the patients went into remission, meaning their cancer symptoms went away, for 3 years or more after transplant. Also,

patients who got a low dose of chemotherapy and radiation did just as well as patients who got a high dose.

The study results are good compared to similar patients who do not get an allo transplant. Less than 10% (1 out of 10) of those patients survive for 3 years. However, 25% of the patients in this study not only survived but also went into remission for at least 3 years after transplant.

This is important information because we now know that:

- An allo transplant might help patients with MCL go into remission if chemotherapy and radiation alone don't work.
- Patients can do just as well after an allo transplant with a low dose of chemotherapy and radiation as they would with a high dose.
- Patients have fewer serious side effects from a low dose of chemotherapy and radiation.

Source:

Allogeneic hematopoietic cell transplantation for chemotherapy-unresponsive mantle cell lymphoma: a cohort analysis from the Center for International Blood and Marrow Transplant Research. Hamadani M, Saber W, Ahn KW, Carreras J, Cairo MS, Fenske TS, Gale RP, Gibson J, Hale GA, Hari PN, Hsu JW, Inwards DJ, Kamble RT, Klein A, Maharaj D, Marks DI, Rizzieri DA, Savani BN, Schouten HC, Waller EK, Wirk B, Lazarus HM. *Biology of Blood and Marrow Transplantation*. 2013 Apr 01;19(4):625-631. Epub 2013 Jan 17.