



A quicker transplant with the best donor available is often the better choice

Patients who have cancer, an immune system deficiency or other life-threatening disease may need a bone marrow or stem cell transplant to get well. ***New research suggests that patients may have better transplant results if they have the transplant sooner with the best donor available, than those who wait for a perfectly-matched donor while their cancer progresses.***

The quality of the match between a donor and a transplant patient is very important. The closer the match is, the better the transplant outcomes are for the patient. The best matches usually come from family members, but a matched family donor is not always available. If that is the case, the patient or their doctor must search for a matched volunteer donor in a national registry.

Sometimes patients and their doctors have to choose a donor who is a close, but not perfect match. While finding a close donor match is important, patient factors are important too. The study looked at several patient characteristics (age, race, diagnosis, disease stage, whether they have other illnesses) and whether they can affect transplant success. The researchers also looked at which particular tissue matches are most important to a successful transplant.

If no perfectly-matched donor is available, a longer search to find a one may not improve the patient's chance for a successful transplant. Their cancer may progress to a more advanced stage while they are searching. If that happens, then the chance for success with a transplant decreases, even if a perfectly matched donor is eventually found. Often an earlier transplant with the best available donor, even if less than a perfect match, offers the best chance for survival. ***Patients should discuss these concerns with their doctors.***

The study results agreed with what other studies have found; the more mismatches, the worse the transplant results were. It also found some differences in transplant results depending on where the mismatch takes place. Finding the correct balance between patient-donor matching and disease stage is a continuing challenge for bone marrow and stem cell transplant physicians.

Source: **High-resolution donor-recipient matching contributes to the success of unrelated donor marrow transplantation** by Lee SJ, Klein J, Haagenson M, Baxter-Lowe LA, Confer DL, Eapen M, Fernandez-Vina M, Flomenberg N, Horowitz M, Hurley CK, Noreen H, Oudshoorn M, Petersdorf E, Setterholm M, Spellman S, Weisdorf D, Williams TM, Anasetti C. Blood, Dec 15;110(13):4576-4583, 2007. Published online Sept. 4, 2007.