

Transplant from half-matched donors may be as good as matched donors for people with lymphoma

What were researchers trying to learn?

In this study, researchers compared 2 types of transplant to see if one worked better than the other. They compared:

1. **A matched sibling transplant** – The donor is the patient’s brother or sister and a close HLA match for the patient. HLA (human leukocyte antigens) are markers found on most cells in the body. Brothers and sisters have a 25% (1 out of 4) chance of being a close match for each other.
2. **Haploidentical transplant** – The donor is a “half-matched” family member. This means the donor matches exactly half of the patient’s HLA. Parents are always a half-match for their biological children and children are always a half-match for their parents. Brothers and sisters have a 50% (1 out of 2) chance of being a half-match for each other.

The researchers studied nearly 1,000 adults who had transplant to treat either Hodgkin lymphoma or non-Hodgkin lymphoma. They want to learn how many people:

- Were alive 3 years after transplant (overall survival)
- Had graft-versus-host disease (GVHD) after transplant. GVHD is a complication that happens when new cells from the donor (the graft) see the patient’s cells (the host) as different and attack them.

What did they find?

Researchers found no difference in how many people were alive 3 years after transplant. For both types of transplant, about 60% (6 out of 10) of people were alive 3 years later.

But, after a haploidentical transplant much fewer people had graft-versus-host disease (GVHD). A year after transplant:

- Almost half (45%) of people who had a matched sibling transplant had chronic GVHD.
- 12% (1 out of 8) of people who had a haploidentical transplant had chronic GVHD.

Important Points:

- **People were just as likely to be alive 3 years after transplant whether they had a matched sibling transplant or a haploidentical transplant.**
- **Fewer people got GVHD after a haploidentical transplant.**

Why is this important?

In the past, haploidentical transplants weren't used very often because people got a lot of GVHD. But now there's a medicine, called cyclophosphamide, to prevent GVHD. In this study, everyone who got a haploidentical transplant also got cyclophosphamide.

Now transplant doctors may consider haploidentical transplant for people with lymphoma if there isn't a matched sibling donor for them. Most people have a half-matched (haploidentical) donor, either a parent, a child, or a sibling.

A transplant doctor can also tell people that getting a haploidentical transplant may lower their chances of getting chronic GVHD. Even though there are medicines to treat chronic GVHD, it can be very difficult to live with.

What else should I keep in mind about this study?

The results of research studies are always limited in what they can and can't tell you. With this study, one drawback is that everyone had lymphoma. So the findings may not apply to people with other diseases. Also, everyone was an adult, so the findings may not apply to children who need a transplant.

Questions to ask your doctor

If you are considering a transplant, you may want to ask your doctor:

- What is the best type of donor for me? Why?
- How does the type of donor I use affect my risk of getting GVHD?
- How many haploidentical transplants has this hospital done? What were the results?

Learn more about

- [This research study](#)
- [Blood and marrow transplant](#)

Source:

Ghosh N, Karmali R, Rocha V, et al. Reduced-intensity transplantation for lymphomas using haploidentical related donors versus HLA-matched sibling donors: A Center for International Blood and Marrow Transplant Research analysis. *Journal of Clinical Oncology*. 2016; 34(26): 3141-3149. PMID: 27269951

About this research summary

Groundbreaking research into blood and marrow transplant is happening every day. That research is having a significant impact on the survival and quality of life of thousands of transplant patients. But the research is written by scientists for scientists. By providing research news in an easy-to-understand way, patients, caregivers, and families have access to useful information that can help them make treatment decisions.

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