For some people older than 50, transplant from young, matched donors is better than half-matched donors

Study looked at ages and types of donors to treat people with acute leukemia

In this study, researchers learned that people older than 50 with acute leukemia live longer after a blood or marrow transplant (BMT) from a young, matched unrelated donor than from a half-matched family member.

For some people, BMT can cure acute myeloid leukemia (AML).

To choose a BMT donor, doctors try to match 8 genetic markers in a donor and patient. Sometimes it is hard to find a donor who matches all 8 markers. A person’s parents and children are always a half-match, also called haploidentical or haplo. Sometimes siblings are a haplo match.

Some studies showed that BMT donors aged 18-40 are more helpful than older donors. And because family members of people older than 50 are likely to be older as well, scientists wondered if a haplo match worked as well for older people.

In this study, more than 800 people with AML, aged 50 to 75, got BMT with one of the following:
- Either a fully matched, unrelated donor, age 18-40
- Or, a haplo donor, age 16-69

Five years after BMT, about:
- 40% (4 out of 10) who had younger, matched, unrelated donors were alive
- 30% (3 out of 10) who had haplo donors were alive

So, for people older than 50 who have AML, doctors recommend matched, unrelated donors, aged 18-40, when possible. This study looked at data from 2008-2015 reported by about half of the hospitals that do transplant. More research is needed.