Some children need intensive care after transplant

About 1 in 7 children end up in ICU within 1 year after transplant

Although blood or marrow transplant (BMT) can cure leukemia, sickle cell disease, and other problems, it can have unwanted effects. The medicines and radiation that help the body prepare for BMT can cause problems. Some of these problems are kidney disease and graft-versus-host disease.

Researchers checked on nearly 7,000 children who got BMT in the US or Canada during 2008-2014. About 15% (about 460) children went back to the hospital intensive care unit (ICU) within 5 years after transplant.

Of the children who went to the ICU, 85% (about 400 of the 460) got better and went home. However, many of these children later got sick again. About 5 years after the first ICU visit, about 45% (about 210 of the 460) children were still alive.

Children were more likely to have very serious problems if they had cancer, lung disease or kidney disease before transplant. Also, 2 types of BMT donors were associated with serious effects: umbilical cord blood and donors who were not matched siblings of the patient.

If children are sick in the year after transplant, it's important to get care right away. And even after leaving the ICU, these children may need to have more frequent check-ups with their doctor.

Keep in mind

This study was not a clinical trial—the children had a variety of diseases and treatments in addition to BMT. This study has not yet been peer-reviewed.

Learn more about

- Transplant for children and teens at BeTheMatch.org
- Clinical trials for children at CTsearchsupport.org
- More study summaries at CIBMTR.org

Source

Zinter MS, Brazauskas R, Strom J, et al. Critical Illness Risk and Long-Term Outcomes Following Intensive Care in Pediatric Hematopoietic Cell Transplant Recipients. Blood Adv. 2023. Epub 2023/12/21. doi: 10.1182/bloodadvances.2023011002.

About this research summary

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This plain-language summary (PLS) was written by Jennifer Motl at the Medical College of Wisconsin and reviewed by an author of the full article.