

Saving umbilical cord blood saves lives

Tragically, most of these precious stem cells are discarded

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The news about the opening of a cord blood bank at Mercy Medical Center is very exciting. I applaud all of those involved who have provided expectant parents in Baltimore with an option for donating cord blood stem cells. But our work is not done, as the important job ahead is continued education on all options for cord blood stem cells. As a scientist — but more importantly, as the mother of a child who passed away after a long search for a stem cell donor — I know the difference this can make for those suffering with life-threatening illnesses.

I have made it my life's mission to educate expectant parents about the value of these cells, and hopefully persuade them not to throw them away. My research supports this as well — I study the evolving uses of cord blood stem cells and projections of how these cells will be used in the future. That's why I know the work cannot stop here.

Awareness about the value of cord blood is still extremely low. A published survey shows that 3 out of every 4 pregnant women consider themselves only "minimally informed" about cord blood banking, and 95 percent of cord blood stem cells are discarded every year — unfortunate given their use in established transplant medicine and emerging regenerative medicine therapies. It is heartbreaking that 70 percent of patients who need a transplant do not have a donor in their family, and yet the stem cells from a newborn's umbilical cord are routinely discarded as medical waste.

Two options are in place today to save these valuable and distinct stem cells: public cord blood banks and private family banks. Public cord blood banks were established to fulfill a public health need. They provide those awaiting stem cell transplants with potential donors, with the added benefit that cord blood stem cells do not need to be as perfectly matched for transplant, as do bone marrow stem cells. A more robust network of donated cord blood units — especially from minority or multiracial donors — would also increase the chances of these patients finding a match. As noted in a recent news article, there are only 250,000 multiracial bone marrow donors registered, out of more than 8 million potential donors.

Private banks, which collect and store cord blood for a child or family member's use, are helping to advance medical research into the use of stem cells to repair damaged tissue, a therapy that currently requires the use of an individual's own cells. Prominent institutions like the Medical College of Georgia, University of Florida, the University of Texas and Duke University have initiated or are in the process of developing FDA-authorized studies to evaluate the efficacy of a child's own cord blood stem cells in the treatment of type 1 diabetes, cerebral palsy and other brain injuries. Private banks also provide a potential solution for multiracial patients in search of a match: direct access to the cord blood of a family member, which could eliminate the often-challenging search for an unrelated donor.

The bottom line issue is public education. According to recommendations issued by the National Academy of Science's Institute of Medicine in 2004, expectant parents should be educated about their

options so they are equipped to make an informed choice about whether to save cord blood stem cells privately, donate the cells for public use or research, or dispose of them.

Public and private cord blood banks both play very important, though different, roles in health care today. Together they can provide the broadest access to health care choices that cover the widest medical needs.

I encourage all prenatal care providers to educate expectant patients about their cord blood banking options, and I urge media, physician groups and lawmakers to recognize the role they play in educating patients and families who stand to benefit from these valuable cells.

Dr. Frances Verter is founder and executive director of the Parent's Guide to Cord Blood Foundation and the website ParentsGuideCordBlood.org, which provides expectant parents with information about cord blood stem cells and cord blood banks