



CORD BLOOD BANKING—WHAT'S IT ALL ABOUT?

What is Cord Blood?

After your baby is born and the umbilical cord is cut, the placenta—along with the rest of the cord—is usually thrown away. But there is still blood in the cord. Blood from the cord has lots of stem cells. Stem cells from the cord can be used to treat some serious illnesses that may occur later in the baby's life. For this reason, some people think it is a good idea to save the cord blood stem cells—or “bank” them.

What Illnesses Can Be Treated with Stem Cells?

Stem cells can be used to treat leukemia and other diseases that attack the immune system. Research is being done on using stem cells to treat illnesses like Parkinson's disease, diabetes, or Alzheimer disease, but these uses are still unproven.

How are the Stem Cells Collected from the Cord?

After the cord has been cut, a member of the health care team will insert a needle into the part of the cord that is still attached to the placenta which has not been delivered yet. Blood from the cord is collected in a tube just like when you have blood taken from your arm. This process does not cause you or your baby any pain, because there are no nerves in the umbilical cord. The blood that is collected has thousands of stem cells in it. The stem cells in the cord blood are packaged, frozen, and sent to be stored in a cord blood bank.

Are There Reasons I Wouldn't Want to Bank My Baby's Cord Blood?

- If you choose to bank your baby's cord blood, the cord will be clamped and cut right after the baby is born so the cord blood does not flow back from the placenta to your baby. Many health care providers think that it is best for your baby if you allow most of the cord blood to flow into your baby before cutting the cord. This can prevent anemia and may help your baby fight illness later.
- The chance that your baby will develop a disease that might be treated with cord blood stem cells is very low. Another concern is that if your child develops a disease that can be treated with stem cells, the cells collected and stored from birth may have the same disease and therefore they might not be recommended for use.

If My Child Needs Stem Cells, Can I Donate Some of Mine—Like Donating a Kidney?

Stem cells can be taken from the umbilical cord, from embryos, and also from adult tissues and organs, such as bone. There has been a lot of research done on adult stem cells and they are used to treat many diseases. If you or your child needs stem cells to treat a disease, the National Marrow Donor Program will help you find a donor if there is one available.

What is the Difference Between Public and Private Cord Blood Banks?

- Public cord blood banks like the National Marrow Donor Program offer stored stem cells to anyone who needs them. These banks have stored cord blood donated by parents who want their baby's stem cells to be available to anyone who needs them. There is no fee to donate cord blood to a public bank.
- Private cord blood banks store your baby's cord blood for possible future use for your baby or members of your immediate family. Private banks charge between \$1000 and \$2000 to collect the blood and about \$100 a year to keep stem cells frozen in the “bank.”

How Do I Decide?

The reverse side of this sheet has some questions to ask yourself as you decide whether to bank your baby's stem cells in the cord blood bank.

Things to Consider About Banking Cord Blood Stem Cells

At this time, the American Academy of Pediatrics does not recommend cord blood banking for everyone. There isn't a large enough chance that your baby will have an illness that can be treated with stem cells to justify the cost for every family. Below, you'll find some things to consider as you make your decision.

1. Is It Very Likely that Your Child Will Need His Stem Cells in the Future?

Some families have illnesses that “run in the family”—inherited illnesses that can only be cured with stem cells. If you already know that your child is at risk for such an illness, you may want to bank the cord blood stem cells.

2. Do You Have Another Child Who Already Needs Treatment with Stem Cells?

If you have a child who needs a stem cell treatment but does not have his own stem cells available, you may want to bank cord blood stem cells from your next child. This child's stem cells may be a match for the child who needs them.

3. Do You Want to Be Sure Your Baby's Stem Cells Will Always Be Available Only for Her?

Private cord blood banks will store stem cells for future use in your family only. The charges vary from one cord bank to another cord bank. The services provided vary, too. You will want to shop around for the best service and best price.

4. Are You Willing to Donate Your Baby's Stem Cells for Someone Else?

You can donate your baby's cord blood stem cells to one of the public cord blood banks for free if there is one in your area. Another person who matches your baby might use the cells. If your child needs to be treated using stem cells someday, he might be able to get his own cells from the bank, but you run the risk that he might not.

5. Would You Like to Make Your Own Stem Cells Available to Someone Who Might Need Them for Treatment of Illness?

If you would like to donate your own stem cells to help save someone's life, consider signing up as a potential donor with the National Marrow Donor Program. In order to sign up, you will need to get your cells typed. Your type will then be kept in a registry of types. When someone needs a stem cell or bone marrow transplant, his or her type will be checked against the registry. If you are a match, you may be asked to donate. You could save a life!

FOR MORE INFORMATION

The National Marrow Donor Program

This program maintains a national registry of potential stem cell donors as well as some state banks of cord blood stem cells, and can be visited at www.marrow.org

American Academy of Pediatrics

Frequently asked questions about cord blood banking from the American Academy of Pediatrics are available from www.aap.org/advocacy/releases/jan07cordbloodfaq.htm

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