Cord Blood Banking What's It All About?

Simply put, cord blood banking is about saving blood from your baby's umbilical cord for possible future use. And why might you want to do that?



It's about stem cells.

Stem cells are amazing. They are undifferentiated biological cells that have the remarkable potential to develop into many different essential cell types, giving rise to specialized cells found in the brain, muscle, blood, or elsewhere. And they can proliferate, replicating themselves to create a stable, renewing population. They can form sort of an automated repair system for the body, generating new cells to heal damaged tissue.

Of course, ordinarily stem cells are quite rare. They can be found throughout the body, but not in high enough numbers to be very useful. Umbilical cord blood, however, is rich in stem cells and, if these are saved, can potentially be used to treat a variety of medical problems in the future.

As of 2013, more than 30,000 transplants had been performed using umbilical cord blood to treat a variety of conditions from leukemia to sickle-cell disease to immunodeficiency. Ongoing research shows promising possibilities in the future for cerebral palsy, multiple sclerosis and many other conditions.



After your baby is born, the cord will be clamped in the usual way. If you decide to save the cord blood, a needle is inserted into the umbilical vein on the part that is still attached to the placenta. The needle doesn't go anywhere near the baby, and there is absolutely no risk to either the baby or the mother from the procedure. Typically 1-5 ounces of blood are removed from the cord, placed in a collection bag, and sent off to the bank.

That's it.

Of course, that's not it.

There are two ways to bank cord blood. Some banks are private. Families pay to store the cells and retain ownership of the cells for their own purposes. Other banks are public and more like organ donation. These programs are free and serve patients around the world, but families give up their particular claims to the cells.



The American Academy of Pediatrics encourages families to consider donating cord blood cells to public banks. Stem cells in public banks are 30 times more likely to be used. Families who store cord blood privately may find that, particularly in cases of cancer and blood disorders, the same genetic markers exist in the stored blood, limiting its usefulness. Additionally, private banking typically costs several thousand dollars, plus annual maintenance costs. And public banks need to adhere to stricter regulation and oversight. For most families, it is probably the better way to go.

So, what next?

If you are interested in banking your baby's cord blood, it is important to decide early enough to make it happen. Typically, once you contact a storage facility, they will send a kit that you can bring with you to the delivery. Hospitals do not generally have these kits on hand, but beyond 34 weeks of pregnancy, these facilities may not send you a kit. So, this is one decision you should think about pretty early on. Talk to us if you have more questions.

More information can be found at the AAP site **healthychildren.org**. <u>https://www.healthychildren.org/English/ages-stages/prenatal/decisions-to-make/Pages/</u> <u>Should-We-Store-Our-Newborns-Cord-Blood.aspx</u>

