

Date: October 29, 2013		[] Full Color [] Black & White	
Publication: The Philippine Star		Circulation:	
Section: Health and Family	Page: E3	Col/Cm:	Base Rate:
Title: The Stem Cells that Save Lives		Ad Value:	
Writer: Joy Angelica Subido		Media Value:	

The Stem Cells that Save Lives

By Joy Angelica Subido



Dr. Arvin Faundo, Cordlife medical director: "The chance to collect your baby's cord blood and umbilical cord comes only once in a lifetime. Apart from blood disorders, cord blood stem cells are used to treat various diseases, including certain cancers inborn errors of metabolism and immunodeficiencies. There are also ongoing clinical trials regarding the potential applications of Umbilical cord stem cells to repair or replace damaged tissues and organs."

The use of stem cells for debilitating or life-threatening conditions no longer belongs to the realm of science fiction. As the applications of stem cells for the treatment of various ailments, or for use in regenerative medicine continue to be proven effective, there is, concomitantly, a greater appreciation for the importance of these. Likewise, there is a heightened awareness on the need to preserve cord blood stem cells. As the preferred source over bone marrow and peripheral blood stem cells, cord blood stem cells are collected at birth and cryopreserved so that they will remain viable should there be a health need.

In the Philippines, the Cordlife is the only service provider of cord blood and umbilical cord tissue banking. With more than 12 years of cord blood banking experience and a cord blood release track record for cord blood transplantation, the company is highly regarded as the largest and most experienced network of cord blood banks across the Asia Pacific region. The company's local cord banking facility is located within the UP-AyalaLand Technohub. With a storage capacity of over 20,000 units, it is managed by highly qualified laboratory biotechnologists and equipped with multiple back-up systems to ensure integrity and viability of stored samples.

Cord blood is an important source of stem cells

"Cord blood also called "placental blood" is the blood that remains in the umbilical cord and placenta following the birth of a baby and after the umbilical cord is cut," explains Dr. Arvin Faundo, medical director of Cordlife. "It is a rich source of hematopoietic or blood-forming stem cells (HSCs) which are also known as "precursor" cells because of their ability to differentiate into the different types of blood cells, namely red blood cells, white blood cells and platelets".

Dr. Faundo says that although HSCs can also be obtained from other sources (such as bone marrow), the number of those opting for cord blood stem cells has been growing. "Since the first transplant was done in 1988, cord blood has become a major source of stem cells for transplantation worldwide," he shares. "More than 30,000 cord blood stem cell transplants having been performed worldwide to date."

Nearly 80 diseases treated with cord blood stem cells

He adds that apart from blood disorders, cord blood stem cells are used to treat various diseases, including certain cancers and bone marrow failure syndromes, inborn errors of metabolism and immunodeficiencies. "Active research is ongoing for stem cell treatment applications for cerebral palsy, juvenile diabetes type 1, stroke, heart disease, brain injury, liver disease, cartilage regeneration, eye disorders, spinal cord injuries, auto-immune disorders, and others."

Why parents should consider cord blood banking for their children

"The chance to collect the cord blood of your child comes once in a lifetime," emphasizes Dr. Faundo. "Some of the most common cancers, such as leukemia and lymphoma, are treatable with stem cell transplant. In the Philippines, leukemia is one of the top 10 cancers for both men and women; and for men, lymphoma is also in the top 10. Acute Lymphoblastic Leukemia (ALL) is the most common type of leukemia in children, with 79% of childhood ALL occurring between the ages 1-9 years. Having a ready supply of stored hematopoietic stem cells when needed is always an advantage."

Certainly, to avail of cord blood banking will entail some expense. However, this is money well spent for the chance of treatment and peace of mind should a health emergency arise. "The stem cells from a baby's cord will be a perfect match for him or her. (The expense) compares well to having to do a national or international search which is costly and time-consuming in an already time critical situation," Dr. Faundo states. Moreover, cord blood banking in Cordlife's Philippine facility will be cheaper than opting to store samples in similar facilities overseas.

In addition, cord blood banking may benefit family members. Research shows that patients have a lower chance of complications in transplants when they receive stem cells from a relative. "Cord blood stem cells can both be used in autologous (where the donor and recipient are the same individual) and allogeneic (where the donor and recipient are different individuals) treatments.

There is a 60% higher chance of finding a cord blood match among family members, compared to sourcing HSCs from the bone marrow," confirms Dr. Faundo.

Looking forward to future developments with umbilical cord banking

Cordlife Medical Phils. Inc. recently introduced its umbilical cord banking service where the actual umbilical cord lining—a rich source of Epithelial (EpSCs) and Mesenchymal Stem Cells (MSCs), two types of stem cells which have shown immense potential—is cryopreserved.

"EpSCs and MSCs found in the umbilical cord lining are currently being studied in clinical trials worldwide," says Dr. Faundo. "EpSCs are considered to be a potential key resource for epidermal and skin regeneration as they have been used in treating surface ulcers, burns, non-healing wounds and tissue trauma such as those from accidents. They are also being studied in regenerative medicine for corneal replacement."

"Applications being studied for mesenchymal stem cells (MSCs), meanwhile, include tissue repair in heart failure, osteoarthritis, stroke, spinal cord injury, Parkinson's disease and multiple sclerosis." However, he stresses that the use of stem cells contained in the umbilical cord are still being studied and, as such, they are not yet used in mainstream medical treatments.

Ethical issues

"There are no ethical issues against cord blood banking," Dr. Faundo firmly states. "Cord blood stem cell transplantation is already a standard form of medical treatment for a number of blood diseases such as leukemia and non-malignant tumors such as thalassemia. We would like to distinguish stem cell therapy as regenerative medicine versus hematopoietic stem cell transplantation. The latter has been performed using bone marrow since the 1960s, and in 1988, the first cord blood stem cell transplant was performed in France to treat Fanconi anemia."

Cordlife's guarantee

"Your baby's cord blood can be the most precious gift you can give your child," concludes Dr. Faundo. "That is why we have it protected by the Cordlife Quality Guarantee, the only guarantee in the Philippines that assures clients of a cord blood replacement or a compensation of up to US\$25,000 if the cord blood loses its viability at the point of transplant. Cordlife has taken added insurance coverage, to safeguard you and your family from financial loss that results from direct malpractice."

For more information about cord blood or umbilical cord banking, or to avail of Cordlife's services, call the 24-Hour Hotline (02) 710-9195 or 332-1888. Email them at info@ph.cordlife.com to make an appointment with a consultant. You may also visit them at their head office in Unit 101, Bldg. H, UP-AyalaLand Technohub Quezon City or in their satellite office at St. Luke's Quezon City, Medical Arts Building Room 216.

