

What Leads Cord Blood Registry To Become A Major Phenomenon In The Medical Commu

Undoubtedly, we have come to a stage where cord blood donation in a cord blood registry has taken up a key role in treating various ailments. Cord blood stem cells from your baby's umbilical cord are considered the building blocks by the medical community. These cells are under the constant scrutiny of medical communities for more latent possibilities of treatments. Researches have brought low cost and effective treatments for diseases like diabetes, blindness, cardiac diseases, spinal cord diseases, Parkinson's diseases, diseases of neurons, cognitive disorders, Alzheimer's disease etc., with stem cell transplants.

Umbilical Cord Blood Cells Registry – An Insurance For Life

Uses of umbilical stem cells have been proved highly effective in curing blood disorders of child or other members of the family, which earlier required bone marrow transplants. Blood cells in umbilical cords of the newborn can match genetic cells of the siblings and parents up to 25%. Hence, cord blood registry and its uses in treating those who match such cells bring extremely positive outcomes. Moreover, cord blood cells transplants reduce the worst drawbacks of organ transplant treatments, that is, graft versus host reaction, which may even lead patients to succumb to death. Hence, cord blood collection is regarded as a way of insuring your entire family's lives to combat major ailments.

According to an estimate, around 72,000 babies are born in India daily. Therefore, 72,000 umbilical blood cords if not banked are going to the trash bin despite their phenomenal healing potential. So, expectant couples are advised to consider cord blood banking to safeguard their future.

The Cord Blood Collection Procedure

The process of cord blood collection begins with clamping and cutting of umbilical cords during pre or post delivery. Cord blood collection, whether pre or post delivery, entails no pains and risk for both mother and child. The procedures advances through following steps –

The first step in cord blood registry is that the parents, especially the mother has to sign a consent form.

She then has to undergo a general health check up and a blood test to ensure that she is eligible for the donation.

The cord blood is collected after the delivery of the baby.

A specialized bag is prepared and bar coded to collect the cells.

After clamping the umbilical cord, a needle is injected to the umbilical vein.

The bag is kept at a lower level to enable blood to be drained in the bag. The entire process should not take more than 10 minutes. The blood unit needs to be transferred to the cord blood banks within 48 hours.

The ideal amount for successful transplants is around three to five ounces. If the amount is less, the collected cord blood is used for scientific researches.

The next step will be to harvest stem cells from the blood drained in the bag and preserve them.

Prior to preservation, the blood units are tested for various diseases like malaria and AIDS.

These stored cells are taken for molecular tests to determine their HLA [Human Leukocyte Antigens, a genetic tissue marker] typing.

Blood cells are stored in cryo-vials at a temperature of -196 degree Celsius in liquid nitrogen solution.

The identity of the mother and the baby will be kept confidential. The mother will be informed about the status of the blood unit and the test results so that she is aware of any infection or disease that might affect her baby.

Because umbilical cord cells do not have HLA antigens on the surface, these cells alleviate risk of showing graft versus host disease [GVHD]. This is why, HLA type detecting is considered a critical step in cord blood registry.

Following the FDA's and other authorities' approval in transfusing cord blood cells in the late 1980s, thousands of umbilical cord blood cell transplants have taken place in the US and have cured many children and adults suffering from various blood related and genetic diseases.

Plan for cord blood registry to safeguard yours and your baby's future.

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