

Dr. Linda Golden—Banking on Stem Cells April 30, 2015

Imagine a world where any disease or condition an individual is plagued with can be treated simply by replacing the diseased tissues with healthy, viable ones.

This nearly impossible feat will soon become the norm with recent technological development in personalized medical treatments. One of the most effective methods of personalized medical treatment is the use of stem cells.

Before any cell in the body grows to become a specialized cell, such as a red blood cell or a brain cell, it begins as a non-differentiated cell, which can become any cell in the body depending on the environment and hormonal influence it is subjected to.

All over the body, there are special areas where some of these stem cells remain in their original state. Their main function in these areas is to help repair the body by differentiating into specific cells when there is damage.

With extensive research, stem cells are now actively used in the treatment of conditions such as diabetes, leukemia, Parkinson's disease, multiple sclerosis, spinal cord injuries, poor eyesight and cardio-vascular diseases.

Research has also shown that stem cell therapy is most successful when the cells used are autologous, i.e., the cells are obtained from the individual they are to be used on or a close blood relative.

Until recently, methods of harvesting stem cells have been very expensive and sometimes painful. Stem cells were mainly obtained from the bone marrow of an individual, which involved drilling into sound bone tissue. Another popular method was to use the blood from the umbilical cord of a newborn.

Thankfully, stem cell banks, such as BioEden and StemSave, have come up with very efficient and cost-effective methods of obtaining stem cells.

Potent stem cells can be harvested from baby teeth, which are shed naturally by children as they grow. Impacted wisdom teeth in teenagers and some adults also contain a rich source of stem cells, which can be harvested from the pulp. By working together with these laboratories, an individual's dentist can help preserve these vital stem cells until such a time that the individual's family might need some form of personalized treatment.

With banking stem cells, a person ensures a secure and healthy future for him/ her and his/her family in a vastly inexpensive way, and saves the trouble of imagining what could have been before it's too late.

