



For Questions, please contact:

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Stem Cell Treatment Program
Patient Handout

Live Cord Blood and Cord Wall Stem Cell Treatments

Stem cells have been used to treat patients around the world for over twenty years. For much of this time, the use of stem cell has been controversial, primarily because of the use of embryonic stem cells in early trials. Stem cells can be collected from many sources including adult fat tissue, adult bone marrow, and adult peripheral blood. However, these cells are less active, and harvesting is complicated. The most effective and commonly used stem cells presently come from the umbilical cord blood or the umbilical cord wall of healthy newborns. The cord blood provides primarily hematopoietic stem cells, while the cord wall provides mostly mesenchymal stem cells.

The FDA has cleared stem cells for human use, but not for any specific illness. Therefore stem cell treatment remains experimental and investigational. This treatment is considered risky because much is still unknown.

Stem cells promote the growth of healthy tissues and the repair of damaged tissues and organs. Stem cells can be injected into joints, spinal discs and even ventricles of the brain. They also may be infused through an IV. Different types of stem cells may be used for different health conditions. The efficacy of stem cell treatment depends on many factors including the quality of the stem cells that are infused. The process of stem cell harvesting, testing and purification is highly regulated.

Currently stem cells are being used to treat immune disorders such as rheumatoid arthritis, lupus, multiple sclerosis, Crohn's disease and others; inflammatory disorders such as osteoarthritis and soft tissue and wounds repair; peripheral vascular disease and COPD; neural disorders and spinal cord injury; Parkinson's disease and stroke; endocrine disorders and infectious diseases, including chronic Lyme disease and many other conditions. Not only do stem cells themselves work, but they also secrete growth factors and immune regulators which can reportedly penetrate the blood-brain barrier to help conditions like headaches, PTSD, bi-polar, schizophrenia, depression and even addictions. Mesenchymal stem cells are also especially helpful in the treatment of connective tissue problems.

Some fear that stem cells may cause cancer. However, quite the contrary, researchers have shown that mesenchymal stem cells actually treat cancer. Stem cells, when introduced into the body, sense chemical signals of tissue damage and migrate to the affected area. There they stimulate growth and repair. Stem cells powerfully regulate the immune system and allow the body to battle cancer and other conditions that involve the immune system.

Stem cells are less effective at restoring tissue that is completely gone, such as end-stage arthritis where almost all cartilage is missing or childhood-onset diabetes (Type 1) when no insulin-producing cells are found.

The side effects associated with stem cell treatment come primarily from the way they are injected and infused. All invasive procedures have well-known risks such as inflammation, organ damage by a needle, and others. Nonspecific side effects such as flu-like symptoms and nausea are more common.

If you have questions about the use of stem cell treatment for your condition, please ask your doctor. Stem cell treatments are *expensive* and *experimental*; you need to put great effort into being informed before making a treatment decision.