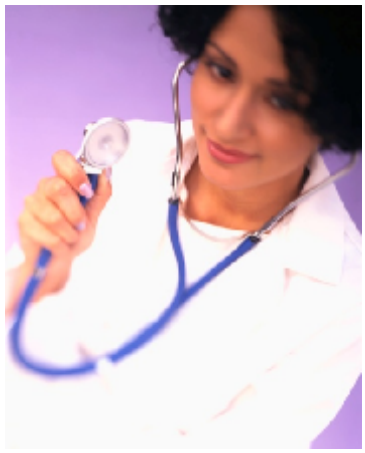
ADULT STEM CELLS: THE ONLY ONES THAT REALLY HELP

Almost every time we pick up the paper, there is an article on stem cells. It can be very confusing. Here are some simple definitions that can help.



Stem cells - cells that have the ability to divide for indefinite periods in culture and to give rise to specialized cells.

Stem cells are obtained from two major sources:

Adult stem cells (ASC) are obtained from any human bodily source such as bone marrow, fat, and skin including neonatal sources such as cord blood, placenta by products at birth, and most recently from sperm cells. ASC are usually multipotent stem cells. They can turn into several different kinds of cells but not all cells.

The positive results from Adult Stem Cells are MANY:

1. A person's own ASC cells aren't rejected.
2. ASC cure and treat more than 70 diseases and are involved in almost 1,300 human clinical trials.
3. A human life is not destroyed in ASC research.
4. New research shows pluripotent characteristics in sperm and amniotic fluid stem cells.

Negatives: NONE except not enough money and the lack of truth in the media and academia.

Embryonic stem cells (ESC) are obtained from human embryos (the first stage of human life) that have been frozen or are from a clone. The stem cells are taken at about 5 to 7 days of age with about 100 cells. The embryo will die.

ESC are pluripotent stem cells and can turn into all kinds of cells.

Positive results from ESC: NONE

Negative results from ESC: MANY

1. No human clinical trials - only on rodents.
2. There would be a rejection problem.
3. A human life would be taken to get the ESC.
4. ESC are not stable or controllable; at times they are cancerous or have turned into

tumors in animals.

5. Eggs in the thousands are needed to form clones - co-eds are selling their eggs - this could be very harmful.

Benefits of Stem Cells to Human Patients

Embryonic Stem Cells - 0

Adult Stem Cells - 73 diseases including:

- 26 - Cancers
- 16 - Auto-Immune Diseases: Diabetes Type I (Juvenile)
- 2 - Cardiovascular
- 1 - Ocular - Corneal regeneration
- 3 - Immunodeficiencies
- 3 - Neural Degenerative Diseases and Injuries: Parkinson's Disease; Spinal Cord Injury; Stroke
- 10 - Anemias and Other Blood Conditions including Sickle Cell Anemia
- 4 - Wounds and Injuries including: Skull Bone Repair
- 5 - Other Metabolic Disorders
- 2 - Liver Disease
- 1 - Bladder Disease

Regenerative Medicine - A field of medicine when a stem cell helps regrow other cells that have been damaged often obtained from the person's own body.

Chimera - hybrid embryos containing human and animal DNA. China developed the first rabbit//human embryo.

Clone - a somatic cell such as a skin cell (any cell except the egg or sperm), containing the DNA of a person is inserted into a human egg cell with the nucleus removed. This cell divides and forms a human embryo with the exact DNA of the original somatic cell. When stem cells are removed from the embryo, it dies.

SOME QUESTIONS THAT NEED ANSWERS

1. Why does the media practically ignore adult stem cell successes and fraudulently promote embryonic stem cells?
2. Why is so much money given to ESC research and not to adult stem cell research? California's initiative gave ESC research billions. Do drug companies pay to test new drugs on embryos? Are all new patents gone on ASC discoveries and not on ESC research?
3. Do scientists want to play God?
4. Are ESC advocates pro-abortion and don't want the federal government to protect any preborn human being?
5. With so much hype on imagined ESC cures, does one political party want to be seen as the caring party not the religious party?

PERSONAL TESTIMONIES AND QUOTES

Dr. Ida Pennella's testimony:

It was the last Sunday in February 2002 when Dr. Pennella was returning home from a trip. She was feeling ill, weak and tired. By Monday March 4, 2002 she was in the hospital having a bone marrow test. The doctor remarked that she tested positive for leukemia, her blood tests were abnormal and death imminent. Her family was with her when she was told she had three to six months to live and was advised that she get all her affairs in order.

Expressing her sense of humor Dr. Pennella asked, "Is there an expiration date on me?"

However there was a research protocol if she was interested called a bone marrow transplant (BMT) Dr. Pennella decided to have the BMT (autologous). She was given chemotherapy doses administered several times daily. She was hospitalized for six weeks then allowed to return home for two, this went on for several months. Finally she was ready to have her own stem cells harvested and reintroduced into her body.

She is currently living a full and productive life after having used ADULT STEM CELL therapy.

Adult Stem Cell Research - Partial Testimony of Ms. Susan Fajt before the U.S. Senate Commerce Subcommittee on Science, Technology, and Space
Senator Sam Brownback, Chairman - July 14 2004

My name is Susan Fajt, and I want to thank Chairman Brownback and members of this Committee for this opportunity to tell you of the adult stem cell treatment I received for spinal cord injury in Portugal by Dr. Carlos Lima, and its results to date. But first, allow me to share with you some basic facts about spinal cord injury to explain why I chose Dr. Lima's procedure.

On November 17, 2001, I suffered a spinal cord injury and became paralyzed in an auto accident. My life has changed in ways unfathomable. Emotions run strong and decisions must be made to end needless suffering. I chose to live and fight for a cure. Perhaps paralysis has robbed me of my freedom, but it can never take away my belief that a cure is attainable through research. There are currently no effective treatments available for spinal cord injury in the United States.

When I was injured I was twenty-four years old, and I loved life more than you can imagine! Today, I have been given a great honor to tell you the story of my quest for a cure for this catastrophic condition.

After tears of pain and years of searching, I found, through my own research, Dr. Carlos Lima in Portugal. My treatment with Dr. Lima took place on June 17th, 2003. I was the 11th patient in the world, and the third from the United States, to receive this treatment.

Dr. Lima used an adult stem cell treatment that uses an Olfactory Muscosa graft to promote growth of axons to bridge the site of contusion, in my hopes that functional recovery would help me to once again walk, run, dance, and do everything I would love, not to mention normal daily activities which are so easily taken for granted, such as bowel and bladder control.

Only part of my dreams has been attained. But I have come farther than my American doctors ever thought. My most recent MRI took place 5 days ago. The doctors were in disbelief at the improvement they saw where my spinal cord had been injured. But most important on my way to recovery is that I can now walk with the aid of braces. I am now preparing to shed the shell of this wheelchair, which has confined me for over two years, to more often use my braces and walker for mobility. This is something my doctors here in America told me would never be possible with my level of injury and to accept my fate.

The U.S taxpayer pays over $30 million per day on care for spinal cord injury and only $68 million per year in a search for a cure. Medical research in the United States is more advanced and far more superior to any other country in the world. Yet citizens, such as myself, risk their lives and are forced to seek treatment in foreign countries.

"If Michael J. Fox would stop traveling the country, trying to convince Congress and people in general to allow Embryonic Stem Cell research and instead take it upon himself to investigate Adult Stem Cell therapy which is already curing many diseases, his Parkinson¹s illness might just be alleviated." Frank Joseph MD

Dr. James Sherley from Massachusetts Institute of Technology, who is challenging his denial of tenure, has heard that his outspoken opposition to embryonic research is a major factor in the case. He said, "Objections to embryonic research are dismissed if a scientist is found to have any religious beliefs."

ADULT STEM CELL SUCCESSES CONTINUE

Embryo stem cell advocates claim adult stem cell scientists have had 40 years to find a cure for juvenile diabetes. Actually the research is ongoing. Just recently a new treatment for juvenile diabetes using adult pancreatic islet cells from adult cadavers is working. The June 2003 Atlanta Journal Constitution reports, "of the 250 patients who have received the newest version of the transplant, more than 80 percent have been free from insulin shots or insulin

pumps for more than a year."

This is just one of many success stories using adult stem cells that is happening almost monthly. Most are being done in other countries. The American College of Pediatricians recommends that public officials consider supporting adult stem cells exclusively.

"Every dollar spent on the failed and unnecessary process of embryonic stem cell research steals resources away from the established utility and potential of adult stem cell research. This is fiscally irresponsible and medically unconscionable." Michelle Cretella, MD

CORD BLOOD HAS MANY SUCCESSES

Two little girls ran up the aisle to the applause of the audience. They were survivors of cord blood stem cell therapy. One had a stroke in utero and the other at about 8 months. Both little girls would have become invalids at an early age except for the fact that their mothers had saved the cord blood from their births. The stem cells from their own cord blood made all the difference and helped cure the parts of their bodies that were affected. Cord blood stem cells are very versatile. Some new mothers donate their cord blood and this is available to others.