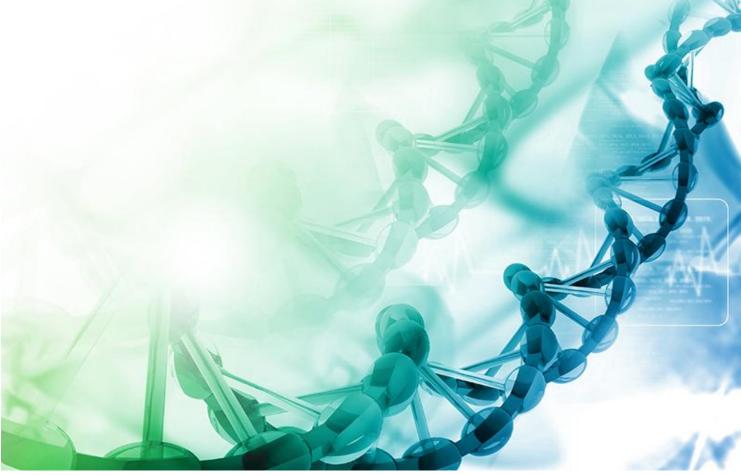
# Stem Cell Treatment for Stroke Survivors

August 6, 2015



When it comes to medical advances, there's something new every day. In the world of stroke recovery, one of the latest breakthroughs is stem cell treatment. We'll establish the different components of stem cell treatment and then discuss the results of the latest study.

#### What Are Stem Cells?

According to Medical News Today, "Stem cells are a class of undifferentiated cells that are able to differentiate into specialized cell types." Woah, that just sounds crazy. Essentially, this means that extracted stem cells can become any type of cell that we want *under the right conditions*. Yes, this means brain cells too! We'll get to that in a bit.

There are 2 types of stem cells:

**Embryonic stem cells** are formed during the first 8 weeks of embryological development after an egg is fertilized.

Adult stem cells exist throughout the adult body and can be found inside different tissues, like the brain and bone marrow, among other places.

# What Does Stem Cell Treatment Involve?

During stem cell treatment, stem cells are administered into the artery and under the skin. Afterwards, the stem cells travel through the body detecting damaged cells and tissues and then attempt to restore them. Stem Cells of America claim that Fetal Stem Cells can also trigger normal cells to operate at a higher level, boosting the body's ability to repair itself.

## What Does the Study Say?

Alright, now let's dig into the good stuff. Stem cell treatment has been previously researched in nonhuman subjects, and in August 2014 scientists published the first study on stem cell treatment for stroke in human subjects. A total of 5 stroke survivors participated and they were all treated within 7 days of suffering a severe ischemic stroke.

Adult tissue stem cells were collected from the bone marrow of the participants and then delivered into their cerebral artery. Although the study only included 5 stroke survivors, all of them experienced improvements in clinical function scores! That's a big deal, and this study showed that the future of stem cell treatment for stroke is very promising.

### Is It Ethical?

The controversy around stem cell research revolves around the fact that embryonic stem cell research involves the destruction of a human blastocyst, which is a fertilized egg that was not given the chance to grow into a fully-developed human. Because of this, embryonic stem cell research is part of a heated debate that ties in with the ethics of abortion. So, is it ethical? Well, that's up to your own personal ethics and beliefs. However, the study we cited does *not* use embryonic stem cells and instead uses adult tissue stem cells.