

## Morality: Choosing God

### Lesson 12 – Facts About Stem Cell Research by Brad Harrub

The numbness and shock refuse to disappear. It's been over six weeks since the initial diagnosis was made, but life refuses to return to any sense of normalcy. The doctor shared with Tasha and her parents a great deal of information that fateful day, but the only word all three of them heard was "cancer." As the doctor discussed options, both parents felt the walls closing in on them. The three of them left the medical center feeling as though they were in a fog. Everywhere they looked life continued to press forward, but for them, time stopped when the word cancer left the doctor's mouth. Looking back, they can't even remember how they got home that fateful day. It would be three days later before Tasha's mom called the doctor's office to ask again precisely what type of cancer was growing in her precious little girl. As the weeks wore on and treatment options diminished, the only glimmer of bright light Tasha's parents held onto was a stem cell transplant. The doctor felt confident that in Tasha's case it would be the magic bullet they were praying for. But stem cells? Tasha's parents were both faithful Christians. Could they, in good conscience, allow their daughter to receive stem cells?

How many times have faithful Christians struggled with a similar scenario. They find themselves aching for a sick loved one, but wrestling with whether or not a Christian can support stem cell research. Likewise, how many times have Christians found themselves with coworkers around the "water cooler" discussing this topic, not really sure what to condone or condemn? By being properly informed we can know not only what the controversy is all about, but we can also determine which side of the debate is in accordance with God's will.

The obvious place to begin is: "What are stem cells?" Stem cells are remarkable cells that have the potential to develop into many different types of cells. For instance, if someone was injured as the result of a car wreck, there are cells within the body that can be activated to repair organs that might have been injured in the accident. Amazingly, these cells have the ability to divide and be produced throughout the lifetime of an individual. Thus, humans have a built-in "repair system." (This seems like strong evidence for an Intelligent Designer!) Discovering the ability of these amazing cells caused scientists to speculate on their ability to cure various diseases. Why use drugs to treat an ailment when you could potentially fix the problem with a natural "repair system?" And so, the race was on to see if these cells held all the promise scientists suspected.

While huge advances have been made, there are still some serious hurdles to overcome as scientists try to perfect this natural repair system. The very nature of these cells demands that scientists be able to control their development into specific types of cells. Imagine a Parkinson's patient receiving stem cell therapy, only to learn that the stem cells developed into blood vessels or a different (and unneeded) type of brain cell. Also, researchers must continually be aware of the possibility of tissue rejection in patients whose immune systems recognize the

stem cell transplants as foreign. The biggest hurdle, however, has nothing to do with experimental procedure, but rather the stem cells themselves. While scientists may resolve the first two problems, they are still left with a major ethical controversy.

The controversy arises from where the stem cells are collected. There are two classes of human stem cells: embryonic and adult. Where are these two classes collected from? (This is information all Christians should be familiar with.)

**Currently scientists use stem cells collected from four different sources:**

1. Adult Tissue (including baby teeth)
2. Umbilical Cords
3. Aborted Fetuses
4. Leftover Embryos from In Vitro Fertilization

Adult stem cells are collected from adult tissue and umbilical cords of new-born infants. Embryonic stem cells are collected from aborted fetuses and leftover embryos from in vitro fertilization. The obvious question that most Christians care about is: Can a faithful Christian support stem cell research? Yes—as long as those stem cells come from one of the first two categories. Is there anything wrong with using stem cells that are collected from a consenting adult or from an umbilical cord?

When we say “adult tissue” exactly what does that mean? Stem cells have been identified in almost every type of adult tissue, including fat. In fact, researchers in California used the by-products of liposuction (fat!) and were able to purify stem cells from it! (Think about how many individuals would gladly donate a few extra pounds to help with this stem cell research!) So when someone makes a dogmatic statement and insists that faithful Christians cannot support stem cell research, they have missed the point completely. The matter truly comes down to does the research involve the destruction of human life? In these two cases it does not. So can a faithful Christian support this type of research? Definitely!

But what about those cases in which scientists want to use embryonic stem cells? Faithful Christians have no business supporting embryonic stem cell research—even if Alzheimer’s or Parkinson’s tears at the very roots of our own families. We must remind ourselves that humans were made in the image and likeness of God (Genesis 1:26-27) and thus, we must uphold the sanctity of life.

The media has been extremely effective at conveying the message that researchers needed embryonic stem cells to be able to cure diseases. The common misconception was that we had to obtain the stem cells as quickly as we could—in the embryonic state, before they had differentiated. However, scientists have known since 2001 that embryonic stem cells were not necessary. Research has shown that adult stem cells are also “pluripotent,” meaning they

have the ability to become almost any cell in the body. Thus, embryonic stem cells are not even needed!

One crucial point the media overlooks and leaves unreported is the fact that adult stem cells have shown far greater promise in various clinical studies! Yes, the media is quick to point out the “potential” benefit of embryonic research. But in actual research that has been conducted and reported in scientific journals, adult stem cells are more effective! For instance, if you visit the “frequently asked questions” on the National Institutes for Health’s stem cell website [<http://stemcells.nih.gov/info/faqs.asp>], one question asks: “Have human embryonic stem cells been used to successfully treat any human diseases yet?” After dancing around the question, and arguing that the field is relatively new, the author notes that while they are “thought to offer potential cures and therapies for many devastating diseases, research using them is still in the early stages.” In other words: No. Embryonic stem cells have not successfully treated any human disease. The site then goes on to mention that adult stem cells have been used to treat human disease.

Fact is, adult stem cells have already been used in treating things such as heart disease, leukemia, rheumatoid arthritis, Parkinson’s disease and Type I diabetes. Meanwhile, we continue to hear news reports about the “potential” benefit of embryonic stem cells. However, not everyone is buying into the “pro-choice” propaganda. For instance, Dr. David Prentice summed it up well in a speech he delivered recently at Rutgers University. He noted: *We keep hearing about the promise of embryonic stem cells, but the claims are simply unsubstantiated. At this point in time there is little evidence of the effectiveness of embryonic stem cells. Proponents have yet to take even one dish of embryonic stem cells and have these cells change into one specific cell, [like] a heart cell or brain cell. Based on experiments to date, it’s not safe to even try and apply them to patients. The bottom line is that our real promise lies not in the use of embryonic stem cells but with adult stem cells. Adult stem cells are today already at work in patients. I can document, through published scientific papers, with over 65 human diseases, where patients are better already, having been effectively treated through adult “stemcells” (emp. added).*

[Dr. David A. Prentice is Senior Fellow for Life Sciences at Family Research Council, formerly Professor of Life Sciences at Indiana State University, and Adjunct Professor of Medical and Molecular Genetics for Indiana University School of Medicine.]

The answer is simple—embryonic stem cells represent life. Can anyone argue that it is logical to destroy one life in hopes of curing another? Do we value a Parkinson’s patient more than an unborn child simply because we can run our fingers over the wrinkles that time has carved into his face? Furthermore, we know that embryonic stem cells are unnecessary, and thus, there should be no controversy. Adult stem cells are already providing beneficial results.

Tasha and her parents can rest assured that stem cell transplants using cells from a relative or donor do not violate any biblical principles and their decision to pursue that form of treatment upholds the sanctity of human life. With God's Word as our absolute standard, the gray areas in many ethical situations become clearly black and white. May we all, with diligence and perseverance continue to seek His counsel.

### **When does God view life to begin?**

The inspired psalmist observed: "For you formed my inward parts; You covered me in my mother's womb. I will praise You, for I am fearfully and wonderfully made; marvelous are Your works, and that my soul knows very well" (Psalm 139:13-14).

- The Lord said to the prophet Jeremiah: "Before I formed you in the womb I knew you; Before you were born I sanctified you" (Jeremiah 1:5).
- The prophet Isaiah confirmed: "Listen, O coastlands, to Me, and take heed, you peoples from afar! The Lord has called Me from the womb; From the matrix of My mother He has made mention of My name... And now the Lord says, Who formed Me from the womb to be His servant." (Isaiah 49:1,5)
- When James observed that "the body apart from the spirit is dead" (James 2:26), the corollary must also be true, in that if the body is living, then the spirit must be present.
- After experiencing terrible tragedy, Job asked: "Why did I not die from the womb? Why did I not give up the ghost when my mother bore me?" (3:11). How can something die if it is not first living? In Job 3:13-16, the patriarch listed several formerly-living-but-now-dead people with whom he would have had something in common if he had died in utero. He mentions kings and princes and child who experienced a "hidden untimely birth" (i.e., a miscarriage). Job considered the miscarried child to be in the same category as others who once lived but had died.
- It is obvious from the text that God views life to begin at conception rather than birth.