

Stem Cell Research: Good or Bad?

Stem cell research has been a frequent news topic, especially since the death of President Reagan. Many people are confused about the issue and not clear on Church teaching. This article attempts to explain stem cell research and offers guidance on the Church's stand.

Stem Cell Basics

Stem cells are those cells capable of becoming another cell type in the body, such as a skin or bone cell. Scientists have found ways to use them to heal damaged body tissue. There are two sources of stem cells, embryonic and adult.

Embryonic stem cells come from living embryos (babies) that are 3-5 days old. The removal of the stem cells from the embryo destroys the baby. Another kind of stem cell, called an embryonic germ cell, comes from aborted babies. Adult stem cells come from three sources:

- Pregnancy-related tissues, such as umbilical cords and placentas
- Several organs and tissues, such as bone marrow and fat
- Cadavers (for neural stem cells)

Success in Stem Cell Therapies

Surprisingly, despite all the media attention, adult stem cells have proven much more successful in treating diseases than embryonic stem cells. In fact, current clinical trials with human subjects using adult stem cells have shown success in treating more than 30 diseases, including brain tumors, ovarian cancer, corneal damage, and Parkinson's disease. However, no embryonic stem cells have yet helped a human patient.

Scientists have discovered that using embryonic stem cells is difficult, because embryonic stem cells are hard to grow in a lab. In addition, embryonic stem cells are from a donor (not related to the patient), and therefore may be rejected after transplantation, much like donated organs are rejected. Finally, embryonic stem cells are more likely to become cancerous.

Adult stem cells offer several advantages. First, persons who receive the products of their own stem cells will not have an immune rejection. Second, these stem cells are easier to harvest and grow within a laboratory environment. Finally, adult stem cells are not as likely to become cancerous.

Moral Issues

The good news is most stem cell research is morally acceptable and should be encouraged. Only research using embryonic stem cells raise serious moral objections. The Church has determined that it is always wrong to use embryonic stem cells because the human embryo (baby) must be destroyed to obtain the cells. It is also wrong to use cells from aborted babies, but is acceptable to use stem cells of miscarried babies with parental consent.

The use of adult stem cells is always morally acceptable, because no human life has to be destroyed. Stem cells from umbilical cord and placenta are only obtained after the birth, when these items are no longer needed. Stem cells obtained from organs and body tissue are also morally acceptable, because no harm was caused when harvesting these cells.

As you can see, Church teaching and scientific research support the use of adult stem cells. The Church encourages further research in adult stem cells to help those suffering from so many debilitating diseases.

Sources: The United States Catholic Conference of Bishops, Secretariat for Pro-Life Activities, "Current Clinical Use of Adult Stem Cells to Help Human Patients," May 4, 2004. Family Research Council, "Stem Cell Research, Cloning & Human Embryos," Rev. Dr. Tadeusz Pacholczyk, Ph.D. in Neuroscience from Yale University, Archdiocese of Boston.

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