Stem Cell First Draft

Chapter 18

The use of stem cells in treatment of disease

Is the potential of one life worth the life of someone already living? This is the question posed by the idea of stem cell research and treatment. In a nutshell, stem cells are the blank slates of human cells. They have the potential of developing into any type of tissue in the human body, thus providing cures and avenues of research that would otherwise be unavailable, however, though their usefulness is undisputable, their acquisition, at least until recent years, was a topic of much dispute, as it involved harvesting a blastocyst, or the very early form of a human embryo, to obtain these cells, thus raising the question that is posed by anything else involving a human embryo, do they have moral status. Though I do question the moral implications as does anybody, I feel that the potential gains that this research presents outweighs the moral costs associated with such research, and farther more feel that with the recent discovery of other ways to obtain these cells, it would be in injustice to those living with these uncurbable diseases to neglect a potential cure.

When looking at the idea of stem cell research, the first distinction that we must make is the differences between the different types of stem cells and how they are obtained. According to the Genetics Science Center at the University of Utah, there are two different types of stem cells that we can gather at this time. hES cells, which are taken from the inner cell mass of a potential human embryo, and IES cells, or somatic cells, which can be reprogrammed from an adult human’s own cells, with the IPS variant being the newer and thus, more limited type. These stem cells are both unique to other cells in their ability to be programmed to become potentially any human cell in the body. These cells have been used in many different lines of research and potential cures, such as a cure for diabetes and other neurological disorders such as Alzheimer’s.

With all this being said, these two types of cell are not created equal, so to speak. The adult derived variant is not near as versatile, both due to the relatively new discovery, as opposed to the kind derived from embryotic cells, which have been around since their discovery in 1981, according to the National Institute of Health. As well as this, embryotic stem cells also have the unique ability to divide almost indefinitely in a laboratory setting, standing in stark contrast to the relatively short life of somatic stem cells, allowing for a much greater yield of useful cells per sample. Along with this, the cells that are created from adult cells have a higher risk of developing into cancers in the body due to their unstable nature. In all cases, due to US law, samples are collected from In vitro fertilization, where only some of the embryos are considered viable and implanted. The remaining ones are either frozen and stored, thawed, thus destroying the embryo, or donated to scientific research with the donor’s consent. This has been a point of much dispute due to it concerning very much the same points as abortion, does that embryo have the same moral and ethical rights as a normal human?

On the surface, the use of any type of human tissue in these types of research projects is a tough thing for people to deal with, and this is reflected in the US laws that have been created to regulate such research. In 1996, the Dickey-Wicker Amendment was put into effect, and prohibited the use of federal funds for the creation and research of human embryos. This was later compounded with the NIH guidelines in 2000, which made the acquisition of human embryos for research only obtainable from In virto fertilization clinics with the donors consent. These guidelines were repeatedly challenged by congress and struck down by President Bush until 2009, in which President Obama repealed the act, and allowed for some stem cell funding from the federal government to take place. (ResearchAmerica.org) However, with the new administration that has come into power under President Trump, the future of stem cell law here in the US is much less clear. Now considering that these have been the cultural norms that we have lived by, most would agree that usually there is a reason that these laws are in place, and to follow them is just, however, in a more subjectivist and egotistical light, if a disease that I suffer from can be cured by research into this field of study, I and those like me would say that it is morally right to attempt to help the large amount of people whom suffer from a nervous disorder, such as Alzheimer’s disease. As well as this, according to Daily Mail, these types of treatments are also opening up the possibility of fixing more permeant disabilities such as deafness, which affects every 1 in a thousand children. (Daily Mail)

Now these types of medical issues affect very large amounts of people, with things such Alzheimer’s being one of the more devastating examples, and through this research, even though it is done through what some subjectivist points of view would consider morally questionable or even morally bankrupt ways, it cannot be denied that this is providing a large amount of people with happiness and hope that they would not have otherwise. From a more utilitarian point of view, using these resources that we have that would otherwise be wasted to provide happiness to a large amount of people is the greatest use available to these embryos that would otherwise be destroyed. (CIRM) According to our textbook, if there is one act that makes the person in question happy, and two other people happy, and another act that makes the person in question unhappy, but makes another 5 people happy, then the second act would be the grater overall good. Thus, by these principles, the idea that just because a small amount of people protest the idea of using stem cells to better those affected by disease, that doesn’t mean that stopping is the right course of action by utilitarian principles, rather that they should allow it to continue because to do so is creating a greater amount of total happiness. This is also allowing these blastocysts to fulfil their grater purpose. Even based on the ideas of Emanuel Kant, for that idea to be true, mush in the same way that we see in the debate of abortion, those blastocysts have to be considered to have the same intrinsic value as a full grown human, or even the same as a older and more developed fetus. That sole idea is almost purely subjective, as I might not agree with the idea that a blastocyst that is not even implanted in a women’s body can be considered human at that point, and thus have the same intrinsic value as you or me. This point as a whole is of course relative to the person whom is interpreting it, and will vary from person to person.

All in all, the idea of stem cell research is one that I very much support. The idea of using resources to their max protentional whereas they would otherwise be wasted is one that I wholly support, and I believe that the good that can come of pursuing this course of research far outweighs the moral implications associated with such research.

Works Cited

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