

Stem Cell and Human Cloning: Ethical Political and Social Issue

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Abstract

The problem of stem cells are not so different from that of cloning. For about two decades, the biomedical community, political groups and bioethical have been very active regarding problem of stem cells as they had been in the past with regard to cloning. This paper focuses on various conflicts between the scientific, financial, and ethical aspects of this debate.

Keywords

Stem cells, bioethics, cloning

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Introduction

Stem cells experiments have become an important breakthrough in medical research. However, it is also a source of controversy, since it requires the destruction of the human embryos used to derive embryonic stem cell. In the last ten years, the biomedical community, bioethical and political groups have been very active regarding the problem of stem cells as they had been in the past with regard to cloning. It is frequently stated that this kind of research will be very helpful in the understanding of human development and the treatment of human disease.¹

Stem cells are undifferentiated cells found in various organs, and in adult individuals they can potentially be derived from differentiated tissues such as the hepatic, muscular, bone, neural or blood. When stem cells are reprogrammed as nerve cells, they can be used to repair organs or damaged structures. They have excellent prospects of treatment in Parkinson's and Alzheimer's disease. Hence, the source from which embryonic stem cells

are obtained is a source of great controversy, namely, human cloning for therapeutic purposes,² therapeutic cloning in UK.³ In this paper, the ethical issue on stem cells are reviewed.

Ethical approach

Those who are strongly opposed to the idea of human cloning perceive it as an essentially evil and moral. In USA, President Clinton's special ethical commission concluded that it would be acceptable to produce cloned embryos for research provided they were destroyed after a certain stage of development. This seems an extraordinarily instrumental approach which would present serious ethical obstacles for many people who regard the early human embryo as more than just a ball of cells for experimentation. To produce a potential human in the knowledge that it would be ethically unacceptable to grow it to term should suggest it was inadmissible to create such an embryo in the first place.³⁻⁸ This diminished moral status of the human embryo is invoked to justify their destruction in the course of research carried out on them, in exchange for potential benefits for countless patients. This is a consequentialist approach, that is to say, in order to determine the morality of actions, only the presumed consequences of performing such actions are considered.⁸⁻¹⁰

Potential Drawbacks and Problems

The development of eugenic techniques to duplicate people with special characteristics (intellectual genius, exceptional strength, beauty etc.) or the wish of evil dictators such as Hitler or Saddam Hussein to replicate themselves. Due to the ethical and moral issues involved in the use of embryos for research ends, it would be much more desirable to explore the possibility of using stem human cells of adult derivation in order to produce specialized cells or tissues for transplantation. Arbitrary solutions have been adopted following Warnock report, in order to allow scientists to perform research on human

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embryos.⁶ Accordingly, the British parliament recently modified the 1990 Act to approve three new fields in which human embryo research is to be allowed : to increase knowledge about embryo development, to increase knowledge about serious diseases, and to enable an knowledge to be applied in developing treatments for serious disease.⁷

The threat of a “black market” for fetuses created from people with ‘positive’ characteristics i.e. outstanding intelligence, strength, beauty, etc., thus creating an industry of fetuses which would be sold to potential parents desiring such children. Thus human life should be respected, it could be argued that it is better to err on the side of ethical caution even in the case of doubts concerning the moment when human life begins.⁸⁻¹⁰

Political and Social Implications

The ethical debate of embryonic stem cell not only concerned with scientists, but, also is a discussed as public issue. Political issue are different for different country about the embryonic stem cells and these differences in fact cause an impediment to an international agreements on cloning.¹¹ European countries such as Poland, Switzerland, Austria and the Czech Republic have no national law governing embryonic stem cell research¹². Germany alone has approved restricted imports of embryonic stem cells from other countries¹³, while the most permissive approach is found in UK, where the first human embryo research licenses have been granted.¹⁴ In the United States, there is fierce public debate over whether or not cloning should be absolutely banned or prohibited only for reproductive purposes¹⁵. While Canada has allowed limited research on embryonic stem cells¹⁶. In Israel, there is more permissive attitude, as liberal regulations support research with embryos¹⁶. It is evident that patients should have an important voice, Embryonic stem cells are presented as holding out the hope to alleviate their suffering, and this is one of the reasons, why a significant number of patients organizations support this research¹⁸.

Control Agency Research

Ridley’s (1997) assertion that governments should not regulate at all in this area, but should leave it all to the individual, seems to be out of

touch with both the public mood and political and expert opinion, certainly in the UK and Europe¹⁹. For example Commons Select Committee on science and technology (1996-97)²⁰, Council of Europe (1997)²¹. New protocols on cloning, and opinion of capacity of adult stem cells to differentiate into almost any cell type, has been frequently discussed these days.^{24,25} Apart from being ethically loss controversial, adult stem cells also have the advantage of being easier to handle than embryonic stem cells. With all probability, embryonic stem cells will be more difficult to control, since they tend to differentiate spontaneously into all kinds of tissue.²⁶

Conclusion

Experimentation stem cells is considered to be a revolution in medical research, we must proceed from the assumption that, sooner or later, the technology for human cloning will develop. We must proceed for the assumption that this technology has the potential to endanger the human social order on the same scale as uncontrolled nuclear energy or ecological destruction in the absence of proper supervision. It would seem to be a better policy to allow this area of technology to progress in very controlled and careful manner and to adopt strict regulations and limitations from the start than to issue a comprehensive and limitations from the start than to issue a comprehensive and complete ban on any and all development. Supervision and limitations imposed by individual countries will not achieve the desired effect unless they receive wide international support.

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