Ethical Issues in Stem Cell Transplantation

*Mohammad Ali Kiani¹, Mohammad Reza Rasti Sani²

¹Department of Pediatrics, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.
²Students Research Committee, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.

Abstract

There is great interest worldwide in discovering and developing a permanent source of tissues which would be capable of generating any cell type and which would avoid the problem of transplant rejection.

Stem cells are cells that can specialize into the many different cells found in the human body. The ethical objections concerning stem cells have focused primarily on their source. Human embryonic stem cell (hESC) research offers great promise of cures for otherwise incurable conditions: spinal cord injuries, ALS, Alzheimer’s, Parkinson’s, etc. While stem cells can be found in the adult human body, the seemingly most potent stem cells come from the first few cells of a human embryo. When the stem cells are removed, the embryo is destroyed. Some people find this practice morally objectionable and would like to put a stop to research and medical procedures that destroy human embryos in the process.

The debate about the moral status of the human embryo has focused on the question of whether the embryo should be treated as a person, or, at least, a potential person. If the embryo is so considered, then it will be morally impermissible to use it merely as a means to an end, rather than as an end in itself. This would preclude both embryo research and any other procedure not directed to the benefit of that actual embryo. The removal of cells from an embryo would therefore not be morally permissible, regardless of whether these cells were to be used for the benefit of some other person. The use of human ES cells raises important ethical issues which are primarily concerned with the origin of the cells and the way in which they are derived. The fact that these cells currently involve the use of human embryos and cadaveric fetal tissue means that careful examination of the ethical issues is necessary prior to the progress of research in this field. If the embryo is a human, then it has a right to life. It cannot be destroyed any more than we could intentionally kill a few children to save many others.

Key words: Ethical, Stem cell transplantation.

Oral Presentation

*Corresponding Author: Mohammad Ali Kiani, Associate Professor of Pediatric Gastroenterology, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran. Email: Kianima@mums.ac.ir.