

'THREE PARENT EMBRYOS'

There is different thinking on this topic even amongst Christians but please feel enabled to research this by reading this article and also accessing other web sites.

The Background

In 2008 Parliament passed a law that gave Government the power to introduce regulations allowing three parent embryos. The Government made an assurance that regulations would only be considered once it was clear that the scientific procedures were safe.

The Government asked the Human Fertilisation and Embryology Authority (HFEA) to assess the safety and effectiveness of the procedure. The HFEA concluded that evidence did not indicate that the techniques are unsafe although it accepted that there was little evidence due to the fact that such procedures are so novel. The HFEA suggested that additional research be carried out to provide further safety information.

Last year the Government gave its support to the technique, after the HFEA said that a consultation on three parent embryos was broadly supported by the public, although this was not totally reflected in the results of the HFEA's own public consultations. If Parliament approves of the regulations then the first three-parent baby could be born in Britain by 2015.

The Science

Supporters of the technique claim that it could eliminate mitochondrial disease, a genetic condition passed from mother to child. Mitochondria are the tiny, biological "power stations" found in human cells that give the body energy. Defects in the mitochondria can cause a range of serious problems including muscular dystrophy. On average, one child in 6500 is affected by a serious mitochondrial disease which may, in some instances, lead to death in infancy.

The technique involves collecting eggs from a mother with damaged mitochondria and a donor with healthy mitochondria. Doctors would then destroy the nucleus of the donor's egg and insert the mother's nucleus in its place. The donor's egg with the mother's nucleus now in it would then be fertilised by the father.

The Concerns

(1) Safety

Supporters of the techniques have no way of predicting what the long-term consequences will be. Furthermore the risks involved in this process are not limited to the first generation; all future generations will be subject to risk. The procedures involve cell nuclear replacement which has not yet been shown to work in humans. Whilst it appears to be effective in lower mammals like mice, use of such techniques in higher mammals has led to a considerable number of miscarriages and the birth of large numbers of abnormal offspring. The Food and Drug Administration agency (FDA) in the United States has warned that there is not enough data in animals or in humans to move on to these new techniques. The HFEA are clearly concerned about the affects such techniques could have on future generations and have advised that children born from these techniques should be monitored for a long period of time after birth. In March 2014 the Government asked the HFEA to conduct a third safety review of the techniques. It is clear that the Government should have waited for a conclusion before drafting the regulations.

(2) Identity of the Future Child

These new procedures have significant implications for the understanding of human life. More than two individuals are participating in the generation of new life and therefore more than two people must be considered as parents. Moreover, the genes from the third person will be passed on down the generations and will be impossible to remove from the family. This raises serious issues of personal and family identity for children born as a result of these techniques.

(3) Engineering the genes of future generations

The intention of these new techniques is to alter the genes passed on to the new generation. This is ethically controversial, as no future generation will have given their consent to the procedures. No country in the world makes provision for such developments. The World Health Organisation has said, "germ-cell therapy, where there is an intention or possibility of altering the genes passed on to the next generation, should not be permitted in the foreseeable future." The Council of Europe's Convention on Human Rights and Biomedicine explicitly prohibits these measures.

(4) A New Eugenics?

This would be the first time intentional genetic alterations of descendants are considered and may give rise to further genetic alterations of human beings. Professor Lord Robert Winston has warned that major advances in genetic technologies could lead to a form of child "eugenics" that could have serious implications for the individuals involved and society in general. He says "we may find that people will want to modify their children, enhance their intelligence, their strength and their beauty and all the other so-called desirable characteristics." Thirteen doctors and professors in the field of genetics or bioethics wrote to The Guardian newspaper warning them that the move "risks dehumanising and commodifying relationships between children and their parents."

The current developments in the UK are unprecedented and are prohibited in almost every other Western country for good public safety and ethical reasons. In light of the ethical arguments relating to the undermining of the sense of identity of future generations, intrusion of a third party into the reproductive exclusivity of a couple, the biological risk to future generations and the legitimate fears about the long term consequences of altering genes, it is clear that we should not be going down this route. Instead we should be focusing on finding real treatments for people suffering from mitochondrial disease and better support for them and their families. Further, Christians must continue to proclaim the inherent value of all life, regardless of its state of health.

(Information quoted from CARE website at www.CARE.org.uk)

Other sites of interest may include:

http://en.m.wikipedia.org/wiki/Three-parent_baby

<http://www.iflscience.com/health-and-medicine/three-parent-babies-possible> (search for three parent babies)

<http://www.cmf.org.uk/publications/content.asp?context=article&id=26082>

<http://www.bbc.co.uk/news/health-21806911>