Cloning for Reproduction

Code of Medical Ethics Opinion 4.2.6

Somatic cell nuclear transfer (SCNT) is the process in which the nucleus of a somatic cell of an organism is transferred into an enucleated oocyte. Cloning for reproduction, that is, the application of SCNT to create a human embryo that shares all of its nuclear genes with the donor of the human somatic cell, has been debated as having possible clinical benefit. It has been suggested that reproductive cloning might be ethically acceptable to assist individuals or couples to reproduce and to create a compatible tissue donor.

Misconceptions often surround proposals for reproductive cloning, including the mistaken notion that one’s genotype determines one’s individuality and using SCNT to create a human embryo would replicate a person (the donor of the somatic cell).

The possible use of SCNT in reproductive medicine also poses risks of unknown physical harms from the technology itself, including concerns about long-term safety, and the possibility that SCNT will be associated with genetic anomalies or have other unforeseen medical consequences. Reproductive cloning also carries the risk of psychosocial harm, including violations of privacy and autonomy and the possibility of compromising the cloned child’s right to an open future by creating enormous pressures to live up to expectations based on the life of the somatic cell donor.

Reproductive cloning may have adverse effects on familial and societal relations and on the gene pool in altering reproductive patterns and the resulting genetic characteristics of a population, including posing harms to future generations if deleterious genetic mutations are introduced. Moreover, reproductive cloning has the potential to be used in a eugenic or discriminatory fashion—practices that are incompatible with the ethical norms of medicine.

In light of the physical risks of SCNT, ongoing moral debate about the status of the human embryo, and concerns about the impact of reproductive cloning on cloned children, families and communities, reproductive cloning is not endorsed by the medical profession or by society.

Should reproductive cloning at some point be introduced into medical practice, physicians must be aware that cloning techniques must not be used without the informed consent of the somatic cell donor, the oocyte donor, and the prospective rearing parent(s), in keeping with ethics guidance for
assisted reproduction.

Further, any child produced by reproductive cloning would be entitled to the same rights, freedoms, and protections as every other individual in society, irrespective of the fact that the child’s nuclear genes derive from a single individual.

As professionals dedicated to protecting the well-being of patients, physicians should not participate in using SCNT to produce children. Because SCNT technology is not limited to any single country, physicians should help establish international guidelines governing its uses before experimentally proven techniques are introduced into clinical practice.

*AMA Principles of Medical Ethics: V*

**Read more opinions about this topic**

Code of Medical Ethics: Reproductive medicine

Visit the Ethics main page to access additional Opinions, the Principles of Medical Ethics and more information about the Code of Medical Ethics.