Modern scientific issue

Cloning and its applications in humans. The modern scientific issue which interests me at the moment is the question of how far, if at all, cloningtechniques could and should be employed in humans or using human tissue. Ever since the presentation of Dolly the cloned sheep to the world in 1997 this has been a hot topic in the news, and there have even been rumours that laboratories in some parts of the world are trying to clone full human beings. This is of course, ethically not advisable, and most countries ban this absolutely and have extremely strict rules when scientists work with human cells and tissue.

What fascinates me most is where to draw the line between good technology that helps people and bad technology that harms people. One example of situations where cloning can help is when scientists take cells from an organ in the lab and grow tissue to help someone recover from damage to one of their organs. If tissue from their own body can be cloned, and then replaced in the body, then there is less likelihood of rejection. Genes can be cloned too, so that patients who are lacking particular genes or segments of genetic code could in some cases be helped with cloned genes. I do not see any moral problem with this kind of medical cloning.

An example of where cloning could be a bad technology is where human embryo cells are used for experiments and then just simply destroyed. This does not show much respect for human life, and many people believe very strongly that experimentation on human embryos, even when they are only a few cells in size, is fundamentally wrong. Some scientists are happy to work with embryos created purely with the intention of providing cells to help another person, but other scientists think this is taking science a step too far, and acting like God, and they refuse to get involved in this type of

work. There is also the fact that when scientists work on clones, there is a huge failure rate and many of the eggs are destined to die just as a normal part of the process, and this helps nobody. There is also a larger than usual amount of problems in later life with cloned organisms, and no one really knows how safe or unsafe it would be to have artificially cloned human beings.

Identical twins are natural clones, which means they have exactly the same genes and chromosomes, and they appear to be quite normal but so far there has never been an artificially cloned human being, as far as anyone can tell. I believe that one day someone somewhere will do this, partly to prove it can be done, and partly to see what the resulting human being will be like. It is a complex issue, and one that I will watch with interest.

References

“ Learn Genetics” Website at the University of Utah. Available at: http://learn. genetics. utah. edu/content/tech/cloning/