Cloning. Pros and Cons of Cloning

Yorova Sayora Karimovna¹, Naimjanova Parvina Ulugbekovna²

¹An English Teacher, ²1 grade student of Medicinal faculty of Samarkand State Medical Institute

Abstract— The proposed articles do not allow us to formulate a single point of view on such an important topic today as Cloning. The proposed material offers to get acquainted with the history and origins of this science, offers to look at the ethical aspects of cloning, and also offers to consider alternative ways of reproducing human organs. Also, these materials contain a lot of interesting data that took place in life and unfortunately most of the facts do not speak in favor of cloning, which clearly shows that it will take many more years for research before humanity can safely use all the fruits of science.

Keywords— asexual reproduction, cloning, genetic engineering, genome, molecular cloning, genetic engineering, reproductive cloning.

1. INTRODUCTION

Cloning and its problems:

This relatively young science has always been associated with many contradictions and contradictions, but genetics and genetic engineering, which can be considered as an independent science in areas such as the study and cloning of the human genome their recent achievements, although they have opened up broad prospects for the development of biotechnology and the treatment of various diseases, have made it possible to change the nature of man and thereby raise many questions of a moral, even philosophical nature.

2. MAIN PART

Does man have the right to change what is created by nature? Does he have the right to correct his mistakes, and if so, where is the impassable line? Will scientific knowledge become a disaster for all of humanity, as it was when the nuclear energy that destroyed Hiroshima, Nagasaki, and Chernobyl was discovered?

One of the brightest examples of the achievements of scientists that humanity has repeatedly faced with its problematic nature is cloning.

Cloning is the process of producing a living thing from a single cell derived from another living thing.

Cloning is usually defined as the production of cells or organisms that have the same nuclear genome as another cell or organism. Accordingly, by cloning, it is possible to create any living organism or part of it that exists or exists as long as it exists, if information about its nuclear genomes is preserved.

Decades ago, cloning was a more discussed topic for science fiction writers than scientific debates or socio-political debates. The rapid development of genetic engineering in the 1990s and the mere flourishing of biotechnology created all the conditions for the practical possibility of cloning living things. Scientific and technological advances, something that often happens, have made everything a reality

The first cloned animal - the mouse - appeared in 1981. But he had a very weak immunity, abnormal genes, and he died quickly. The most famous clone - Dolly the Sheep - was "born" in 1996. But in 2003, Stellar Sheep died of a lung disease that usually affects older sheep. However, there is no evidence that this is evidence of premature aging. In fact, sheep kept at home have a much higher risk of this disease. After her death, Dolly was completed and exhibited at the Royal Museum of Edinburgh. A clone of this form will, of course, live forever. Last year and this year a whole herd of cows and sheep called khimis appeared in Germany. To their cells, a gene was added, which is responsible for the presence of a protein of chyme in milk. Cheese is prepared from such a product, immediately bypassing the stage of expensive processing. In addition, the "photocopy" of the best samples from the herd creates a peculiar Bank of the most expensive breeds.

Hundreds of attempts to create a monkey clone have failed. Apparently, when cloned cells in primates divide, DNA is not properly transferred to new cells. Some cells take in too much or too little DNA and are unfit for life. Attempts to clone primates, including humans, appear to have failed so far, scientists say

The possibility of human cloning is vaguely accepted by public opinion, there are "against" and "against" reasoned opinions. It is noteworthy that the positions of the scientific community and the clergy, who expressed conflicting views on the issue, clashed again. At the same time, most scientists are very reluctant to clone humans, and there are many opponents among them. Religious leaders are strongly opposed to conducting such experiments, but representatives of some supernatural cults support the idea of cloning people. The problem of human cloning is primarily a moral problem. Man invades the realm of being, for which he is not responsible by his nature, which makes the consequences of such steps unpredictable. It is no coincidence that the representatives of the major religious movements in the modern world - Christians, Jews and Muslims - show a rare unity in their sharp negative attitude towards human cloning. Man happens in a divine or natural way, but in no case should he become a product of production in the literal sense of the word.

Depending on the purpose of clone production, human cloning is divided into a method of reproduction (reproductive cloning) and a method of cloning (therapeutic cloning) for medical purposes, for example, for organ regeneration. to produce that person or drug. The second type of cloning is not aimed at complete rest of the creature and continues methodically without the use of a donor uterus.

The so-called dominant direction in the field of therapeutic cloning is research in the field of plant cultivation. stem cells, which are the same building material for the body, they appear in 4-5 days of development.

Stem cell research is considered by many to be an emergency because cloning is possible. they can help keep hundreds and thousands of naturally born lives alive.

Controversy over the ban on cloning has almost led to a reduction in the Wilmut project, but scientists have been able to defend the results of their work and continue their research.

Is it really necessary to fear the consequences of cloning people? What are the opportunities to apply the new technology in practice? Newspapers around the world are trumpeting about geniuses who open new horizons for humanity or, conversely, replicate geniuses who create dubbing and remain elusive. These assumptions are absolutely unfounded, as journalists do not take into account the influence of upbringing and social environment on the formation of personality. Many fear the possibility of clones multiplying to obtain the same organs as donor organs. Such a prospect is undeniable, but humanitarian experiments are currently underway to raise mammals whose organs can be transplanted to humans in the future.

Thus, nuclear transplant technology increases the chances of a person succeeding in transplanting a pig heart. New methods are important for agriculture. Dr. Ron James, a PL Therapeutics researcher who won the rights to Wilmut's work, believes it is possible to clone elite breeds of cattle and other farm animals.

Cloning can also be used to rescue endangered animals and restore forests needed to maintain atmospheric balance. The new technology of nuclear transplantation simplifies the creation of transgenic plants and animals, i.e., identifies certain organisms that have some foreign gene in their genome, such as cold tolerance and high productivity, or the production of certain products. substances, especially rare drugs.

3. CONCLUSION

So, is cloning a good thing or a bad thing? When completing the work on the abstract, it is impossible to come to one conclusion. Everyone has their own opinion on this matter. But still, I will try to summarize the results. Scientists need science to develop further. They will put their experiments even despite the prohibitions. Doctors are in favor of therapeutic cloning - because it will help to provide real help to a person and save his life. Representatives of almost all faiths are against cloning in general, because they claim that a person cannot create like God. Public opinion is also directed mainly against the mindless cloning of everything and everything. Politicians in many countries have issued moratoriums and bills prohibiting cloning activities, at least in relation to humans. I believe that science, of course, should develop, but bioethical principles must be followed. All the achievements of science should be used for the benefit of man.

4. REFERENCES

[1] T. Longmore, "Guide to the study of vision for military doctors" (revised by a doctor of medicine Lavrentiev, 1894);

[2] moodle.sammi.uz//.

[3] English-Russian dictionary / V. K. Muller, C. K. Boyanus. - Moscow, 2002.

[4] Yorova S.K., English for medical students (Practical course). Manual training SamDTI. - Samarkand: 2021 year.