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Commentary

A Comment Article on the Mechanism of the Life Activity: The Action of Electrical and Magnetism on the Biological Life

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Introduction

The life system of the human kind, in it's applying of biological activities, is performing the mechanisms of the life survival, is mainly, by the influence of the magnetism and electricity. While, electricity and magnetism are usually associated with each other. Therefore, the electricity and magnetism are the main for the system to be dealing with, and to make the important of survival. Where, this is for the concerning and acting in all mechanisms of the living kind. This matter can be explained by the applied actions of many practical Physio-biological and Physio-chemical performing in the body of the living kind. These actions, of the magnetic and electrical fields phenomena, are having practical examples in the human life, and that are experienced by some results of the applying researches done by many researchers, where, the examples are as that of.

The Process of Cloning

The cloning was performed by the scientists, who were applying the experiments by acting of a tiny electric current on a Dolly goat's cell, [1]. They haven't mentioned how much was the electrical current that they have used to perform their applications. As the phenomenon shows always, that, it is usually, the electrical current is producing a magnetic effect, [magnetic field]. Now this magnetic field is the responsible and the main action to produce the new life, [in the DNA molecule-the chromosome], of the cell of the living kind. The function of the magnetic field here, is to awake all the dormant genes, (of the DNA molecule) in the nuclear cell. The process, in this performance, is going to be as if the cell is to be an egg, which is immediately, now, to be in its first fertilized process. Where, all the genes are in process of activity, and there is not any dormant genes in the cell.

Therefore, the situation is now, as that of the real of the beginning action of the fertilised egg cell. Hence, this, fertilized, egg cell, now, is going to perform all the necessary staged to produce the life, from the dividing in cells, and then to produce the tissues, organs and systems of the kind living. So then the Dolly goat been created. This is, then, the performance, of the electrical and magnetic phenomena on the living kind.

The DNA Replication, and the Shortening of the Telomere

The DNA replication is the process, in which the function is to creating new DNA molecules in the nuclear of the cell. The DNA replication is performed by the effect of the magnetic field. This is done by the action the magnetic field of the strand of the DNA, [2]. The phenomenon of the magnetic field can be created by the action of the moving charges on each strand of the DNA. Where, that is actually performed in the two strands of the DNA, when the strands are unfolded and held apart, from their splice together. Where, this shows that each strand is may be accounted as a source of a magnetic field. Therefore, the DNA replication is done by the mechanism of the action of the magnetic field (magnetic flux) of the strands of the DNA, in the amino acid of the cell nucleus [2]. This function is performed directly by the action of the magnetic flux and the explanation of this magnetic phenomenon is that, the magnetic field is producing the both of the actions: induction and remanent, [residual], magnetisation. The result is, then, acting in the amino acid of the nuclear cell.

The performance of the processes of the induction and remanent magnetisation, is to producing: a daughter strand [of the DNA molecule], in conditions of a similar structure and pattern to that of the parental strands, also, this daughter strand. is having a

shortening of the telomere, [2], as this shortening of the telomere, is because of the action of the remanent magnetization. Now, this is showing that, the performance of DNA replication is processing by the action of the electrical and magnetism. Then it can be emphasis that, the whole work of the process of DNA replication, is to explain the mechanism of that: how the genes, [of the DNA] are operating. This will be useful in work and to help in future for improvement. Which is that as when it will be dealing with the DNA performances, and that, to include the action of the magnetic field.

The Effect of the Cancer

The cancer cells are accounted as special cells, which is from the way of their growing, which is produced by certain kind of action of DNA replication, [where, it is said to be that they are having an up normal growing]. It is, also, by, specially, from the length of their telomere of DNA.

The DNA telomere, of the cancer cells, is shortening in each DNA replication, but the daughter's telomere is elongated after the replication, (by the action of the telomerase enzyme), to be as long as those lengths of the parental telomere. This is one of the main differences of the cancer cells than those of somatic cells.This situation of telomere maintenance to the cancer cells, is leading to infinite growth of these cells, [3]. These observations suggest that longer telomeres would be more advantageous for cancer cells if telomerase-mediated telomere elongation is abrogated, [4].

Now, for the matter of the lengthening action of the DNA telomere of the cancer cell, it can be suggested that, it may be a practical method for the cancer treatment, is that to find out a new method, which is for trying to reach a result of shortening the telomere in each DNA replication. Therefore, this will gives the same approach for the results of the shortening telomere of the somatic cells. Also, there are some methods may be used, which are by suggesting mechanisms for shortening the telomere of the DNA molecule, of the DNA cells, and they are as:

Natural Action

A method is used by aiming to apply a mechanism of a magnetic field, [magnetisation], on that of the exposing cancer cell tissues, [5]. Where, this method could be applied by using some certain amount and direction of the magnetic field, which is at right and useful effect on the cancer cells. Where, this is due to the target aim is which is to reduce the length of the telomere of the cancer cell, during the replication. Therefore, this result may be will lead to create a daughter cells which are similar to those of the somatic cells, and then to finish the cancer cells, and will not have any tumour formation in the tissues.

Therefore, it is believed that, a relevant important to include the magnetic action in the medical and biological mechanisms, for the activities of the kind living. This is for that, the magnetic action is concerning with most of the kind living activities in life.

A Biological action, which shows as

a) Telomere elongation by the telomerase enzyme is repressed in cis by the telomeric protein TRF1.

Tankyrase 1 inhibition in human cancer cells enhances telomere shortening by a telomerase enzyme inhibitor and hastens cell death, [6]. It implies that: both enzyme activity and accessibility to telomeres can be targets for telomerase inhibition.

b) The number of repeats at an individual telomere was reduced when hybrid proteins containing the Rap1p carboxyl terminus were targeted there by a hetero-logous DNA-binding domain, [7]

c) A synthetic telomerase enzyme inhibitor, gradually shortens telomeres at non-acute lethal doses and eventually induces senescence and apoptosis of telomerase-positive cancer cells, [8]. Also, there is another matter, which can be added, and this is:

B The Cell Death Process

[of the so called - The cell suicide]-where, the mechanism applying here, is to stopping the DNA from future replication. This is when the telomere is approaching a certain length, [called a critical length-for a certain number of pair pairs]. Where, the work mechanism, is that of the action under the influence of the electromagnetic effect. This is the result of the residual magnetisation, where its applicable effect is: to shortening the telomere in every replication of the DNA molecule.

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None.

Conflict of Interest

None.

References

1. Keith Henry Campbell, Jim Mc Whir, William A Ritchie, Ian Wilmut (1996) Sheep cloned by nuclear transfer from a cultured cell line Nature 380(6569): 64-66.
2. Rojeab Adnan Yousif (2014) The Processes of DNA replication and the shortening of the telomere, are influenced by the action of the magnetic field. International Journal of Genetic and Genomics 2(6): 114-120.
3. Chiaki Fujiwara, Yukiko Muramatsu, Megumi Nishii, Kazuhiro Tokunaka, Hidetoshi Tahara, et al. (2018) Cell-based chemical fingerprinting identifies telomeres and lamin A as modifiers of DNA damage response in cancer cells. Sci Rep 8(1): 14827.
4. Keiji Okamoto, Hiroyuki Seimiya (2019) Revisiting Telomere Shortening in Cancer. Cells 8(2): 107.
5. Adnan Yousif Rojeab (2015) Novel strategy to cure cancer, Cancer Research Journal 3(1): 6-10.
6. Hiroyuki Seimiya, Yukiko Muramatsu, Tomokazu Ohishi, Takashi Tsuruo (2005) Tankyrase 1 as a target for telomere-directed molecular cancer therapeutics. Cancer Cell 7(1): 25-37.
7. Stephane Marcand, Eric Gilsin, David Shore (1997) A Protein-Counting Mechanism for Telomere Length Regulation in Yeast. Science 275(5302): 986-990.
8. Chiaki Fujiwara, Yukiko Muramatsu, Megumi Nishii, Kazuhiro Tokunaka, Hidetoshi Tahara, et al. (2018) Cell-based chemical fingerprinting identifies telomeres and lamin A as modifiers of DNA damage response in cancer cells. Sci Rep 8(1): 14827.