

Harnessing Healing Inside the Body?

The contemporary science has accomplished incredible achievements in diverse turfs. In this admiration, research in the field of genetics is noteworthy, since they can start a new era in medicine and science at large. However, nowadays, the research of stem cells and their use in modern medicine/dentistry often confronts the opposition from the part of the public as well as experts. In spite of considerable progress in the stem cells research, it still remains a kind of battlefield between adversaries and protagonists of the stem cells research. In actuality, there are no alternatives to further research in the field of genetic, including stem cells researches because the potential of these researches overshadows arguments of their opponents.

On studying the intricacies of the stem cells research and related issues, it is imperative to emphasize the fact that adversaries of such researches basically stand on the religious ground. At any rate, they view the stem cells research as an attempt of scientists to play God. Obviously, this attempt is offensive for representatives of different faiths. Therefore, they develop their arguments concerning the necessity to ban totally the stem cells research. Their position is backed up by scientists, who believe that the stem cells research increases unsurpassable ethical barriers, as such researches can raise the problem of cloning and other arguable issues.

However, all the arguments of opponents of the stem cells exploration are irrelevant to the huge potential and benefits of the research can bring to humanity. First, the stem cells research extends human knowledge of genetics and functioning of living organisms at large. The research in this field provides scientists with valuable scientific information that can be used in the medicine as well as other fields. At the same time, stem cells research definitely contributes to the progress of medicine and genetics. In such a context, opposing to the stem cells research is similar to opposing to the research of the outer space and solar system in the middle ages. What is meant now is the fact that it is impossible to stop the progress. Moreover, attempts to stop the progress, including the ban of the stem cells research, can be harmful because, in such a way, the progress of modern medicine and genetics will be suspended. Therefore, instead of the better understanding of the subject and its essence and using its full potential, scientists will view the stem cells research as an improbable.

In dental science too, amazing achievements have been made in stem cells research. The detection of more reliable markers for dental stem cells may help scientists to trace the process of stem cell development and

differentiation as it naturally occurs in the body during normal growth or after tissue injury or damage. Much research has also been done on dental stem cell behavior in culture.

Instead of removing and reimplanting stem cells, alternative approaches called autotherapies employ small molecules or other minimally invasive methods to trigger stem cells' healing properties inside the body. For example, scientists are exploring ways to repair teeth by recruiting dental stem cells to the site of damage or decay and prompting them to regenerate pulp and dentin. At this point, it may be possible to refer to abundant benefits of the stem cells research which can bring to the science, medicine, or dentistry ultimately to humanity at large. In fact, the stem cells research can contribute to the efficient treatment of terminally ill patients. Thus, it is a ray of hope for millions.

For instance, today, health-care professionals can save the lives of patients who would have died. In addition, the stem cells research opens larger opportunities for transplantation that will save the lives of many patients and help them to return to the normal life.

Based on the current evidence, clinical use of dental stem cells may be closest to fruition for root canal therapy or repair of bone defects caused by gum disease. However, the possibility of regenerating whole teeth and other uses may be many more decades down the road.



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