

Reprogramming of pericyte-derived cells of the adult human brain into induced neu...

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Summary

The process of reprogramming somatic cells into neuronal has presented a new approach towards cell-based therapy of neurodegenerative diseases. One of the main challenges in the transformation of neural reprogramming into therapy is whether the adult human brain encloses some cell populations which are acquiescent to direct somatic cell conversion. In this scenario, it can be clearly demonstrated that cells from the cerebral cortex of an adult, which express pericyte hallmarks can be easily reprogrammed into neural cells. This can be done through the use of retrovirus-arbitrate recorded factors. The cells then obtain the capability of rhythmic action and probable firing actions aimed at other neurons. The results obtained from these actions raise a possibility of the practical exchange of aboriginal cells in the adult human brain to provoked neural fates. A major hurdle that has been recognized for the conversion of neuronal reprogramming into therapy is whether direct translation can be attained from the cells inhabiting the human brain.

Comments on the presented material

The information presented in the reviewed material is credible as it comes from a series of experiments conducted and the conclusions made based on the information presented in previous studies. The experiments were performed on cultures from human specimen derived from surgical approaches and fluorescence activated cell sorting. This forms a good background for reprogramming stem cells based on previous experience. I would also like to retaliate that reprogramming the stem cells has several

advantages and should be further pursued. It helps in cancer management, repair of damaged cells and a reduction in risk during a transplant. It also helps in the treatment of damaged organs. This is a positive attribute and studies in this field should be further explored as it has several benefits in the field of biology.

Work Cited

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