

Stem Cell And Tissue Engineering Approach For Neuronal Recovery Following Spinal Cord Injury : Current status and Future prospect

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Abstract

A spinal cord injury (SCI) is a devastating condition that results in sensory and motor loss as well as various organ failures. Current treatment approaches, like surgery and medication, have shown to be effective, however they are unable to provide a complete cure for persistent SCI symptoms. Tissue engineering, which includes neuroprotective or growth factors, stem cells, and biomaterial scaffolds, has gotten a lot of interest because of its capacity to regenerate and bridge the gap in the damaged spinal cord. Tissue engineering in preclinical investigations indicated functional recovery and neurorestorative benefits. Only a few clinical experiments have shown that tissue engineering is both safe and effective. However, additional research into prospective therapy options is required. The pathogenesis of spinal cord injury and current treatments are summarised in this presentation.

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Biography

The Leena R. Chaudhari has completed her bachelor in Science from Dr. Babasaheb Ambedkar Marathwada University, Aurangabad in 2018 and completed her master degree in Stem Cells and Regenerative Medicine from D.Y. Patil Education Society, Kolhapur, Maharashtra, India in 2020.

Now she is working as PhD student in dept. of stem cell and regenerative medicine. Along with she is also working as junior research fellow in internal funded project of D. Y. Patil Education Society, Kolhapur. She has published one research article in reputed journals and 3 paper are submitted. She is a budding researcher having area of interest in stem cell and tissue engineering and 3D printing, neuroscience, microbiology, cancer biology.