Stem cells and progenitor cells in the nervous system: a recent advance in animal research

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Abstract The nervous system is one of the most important and complicated organ systems in mammals. Recent studies in neurosciences have revealed that neurogenesis in the central nervous system (CNS) takes place before and after birth, of which the process continues throughout adulthood. Neural and glial developments occur at the specific sites of the brain, which could be influenced by several environmental factors. Interestingly, these cells can be isolated from the brain and maintained *in vitro* under standard culture conditions. The aim of this article is to review the types of neural stem cells, progenitor cells, recent advances in this research field and the possibility to apply these cells for the treatments of neurological disorders in human and animal.

Keywords: stem cells, progenitor cells, nervous system