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## Cellular therapy after spinal cord injury using neural progenitor cells

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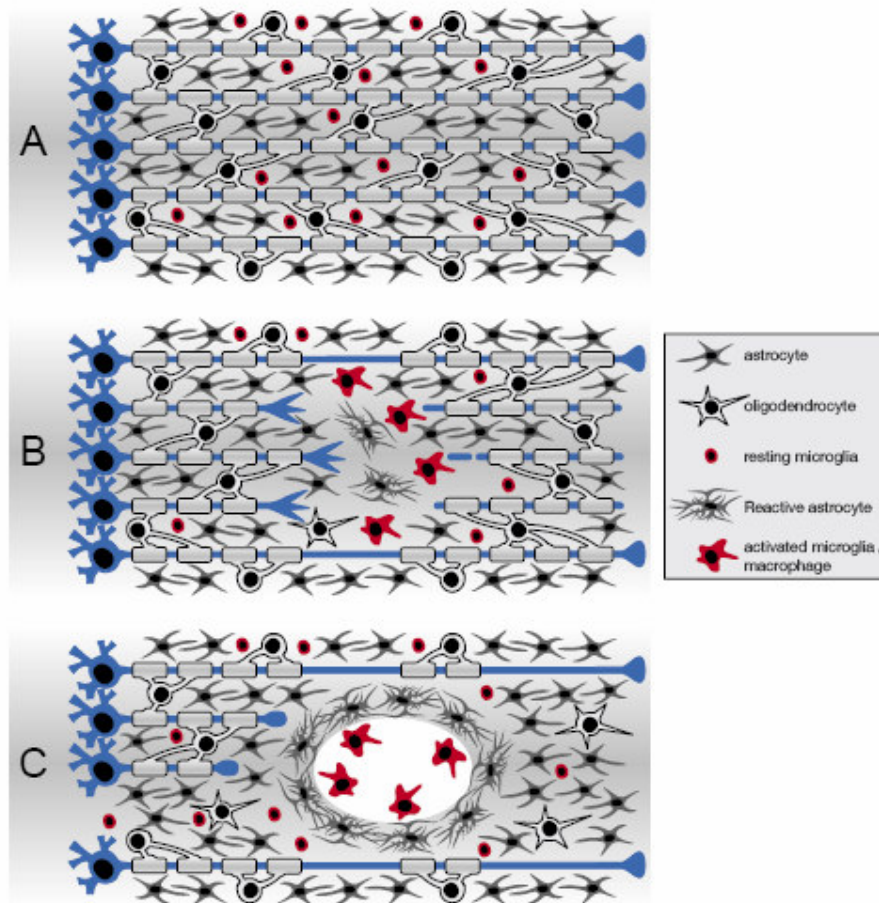
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**Figure 1:** Schematic representation of spinal cord injury. (A) In the intact spinal cord, neurons innervate distant targets with their axons (blue). In most fiber tracts, the axons are myelinated by oligodendroglia, whereas the astroglia give structural and homeostatic support (grey). The resident microglia are in a resting state (red). (B) After a traumatic insult, the mostly blunt injury leads to disruption of axon fiber tracts. Necrosis at the lesion center and degeneration of the distal portion of the lesioned axons induces microglia activation and the invasion of peripheral macrophages. Furthermore, proliferation and hypertrophy of astrocytes leads to reactive gliosis. (C) In the chronically injured spinal cord, a cystic lesion cavity that is surrounded by reactive astrocytes has developed. Apoptosis of oligodendrocytes has led to demyelination of otherwise intact axons. Furthermore, lack of trophic support can lead to neuronal loss.