

Learning Objectives

MedBridge
Pathophysiology and Plasticity in Neurologic Conditions
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Course Objectives:

Upon completion of this course, learners will be able to:

- Describe central nervous system responses to injury including:
 - o Focal injury as a result of ischemia or bleed using stroke as an example
 - o Diffuse injury as a result of trauma using TBI as an example
- Understand degenerative disease CNS pathophysiology using MS as an example
- Summarize physiologic processes that may lead to additional dysfunction after injury/disease onset:
 - o Ischemia
 - Metabolic cascade
 - Excitotoxicity
 - Inflammation
 - o Immune system response
 - Demyelination
- Describe cellular level processes that lead to neuroplastic change and improvement:
 - Intrinsic factors
 - o Extrinsic factors
- Summarize behavioral principles that drive plasticity