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综述

髓鞘相关抑制因子与中枢神经系统损伤

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摘要
轴突生长的抑制因素是中枢神经系统受损后再生困难的主要原因之一。髓鞘相关糖蛋白(MAG),Nogo蛋白和少突胶质细胞-髓鞘糖蛋白(OMgp)是3种主要的髓鞘相关抑制因子（MAIFs）。Ephrin-B3是另外一种髓鞘相关抑制因子。Nogo受体，p75受体和LINGO-1组成Nogo受体复合体。Rho-A和蛋白激酶C是MAIFs发挥轴突生长抑制作用的重要胞内分子。拮抗MAIFs或是阻断MAIFs的信号通路，可促进中枢神经损伤后的轴突再生。

关键词 中枢神经系统；再生；髓鞘；Nogo；脊髓损伤

分类号

Myelin-associated inhibitor factors and central nervous system injuries

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Abstract
The presence of some inhibitory mediators such as myelin-associated glycoprotein, Nogo protein and oligodendrocyte-myelin glycoprotein is one of reasons of the difficulty of axon regeneration after the injury of adult central nervous system (CNS). Ephrin-B3 is another identified myelin-based inhibitor of neurite outgrowth. There are no less than three elements in the Nogo receptor complex: the Nogo receptor，the p75 receptor (p75NTR) and LINGO-1. Rho-A and conventional protein kinase C have been identified to be necessary components for the axon growth inhibition induced by Myelin-associated inhibitor factors (MAIFs). Many strategies have been studied to treat CNS injuries, such as spinal cord injuries (SCI), either blocking MAIFs or blocking MAIF signaling.

Key words central nervous system regeneration myelin Nogo spinal cord injury

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