

综述

载药纳米粒透过血脑屏障机制的研究进展

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摘要 血脑屏障是维持中枢神经系统内环境稳定的结构基础, 有效保护脑组织避免外源性有害物质侵害, 但也阻碍许多治疗药物进入脑内, 限制了中枢神经系统药物的临床应用。如何有效透过血脑屏障成为此类药物发挥治疗作用的关键环节。纳米粒作为一种新型药物载体, 能携载药物透过血脑屏障进入脑组织, 提高脑内药物浓度, 实现脑内靶向给药。本文对载药纳米粒及其透过血脑屏障机制的研究进展作一综述。

关键词 [纳米粒](#) [血脑屏障](#) [中枢神经系统药物](#) [药物载体](#)

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Blood-brain barrier transport of drug-loaded nanoparticle: research advances

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Abstract

The blood-brain barrier(BBB) is the basic structure to maintain homeostasis of the central nervous system, which has protective effect on brain tissue, but prevents many drugs into the brain, resulting in the limited clinical application of these drugs. How to effectively deliver the drugs through BBB has become a key step. As a novel drug-loaded carrier, nanoparticle can carry drugs through the BBB and increase the drug concentration in the brain, so as to achieve brain targeted drug delivery. This article briefly reviews recent research advances in drug-loaded nanoparticle and the mechanism of penetrating through BBB into brain tissue.

Key words [nanoparticle](#) [blood-brain barrier](#) [central nervous system agents](#) [drug-carrier](#)

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