Inflammatory mediators of cerebrospinal fluid from patients with spinal cord injury

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摘要

Abstract

BACKGROUND: The guidelines of MP treatment for acute SCI are still under debate. We examined the inflammatory mediators of CSF in patients with SCI and assessed the effect of MP treatment. METHODS: We studied 7 patients with acute SCI at the cervical level and examined the mediators of CSF in patients by cytokine antibody array, ELISA and gelatin zymography. RESULTS: We found that levels of IL-6, IL-8, monocyte chemoattractant protein-1, neutrophil-activating peptide 2, intracellular adhesion molecule-1, soluble Fas, tissue inhibitors of metalloproteinase 1, and matrix metalloproteinases-2 and -9 were upregulated in patients with complete SCI without MP treatment as compared to patients with MP treatments, incomplete SCI, or controls. Nerve growth factor was upregulated in patients with MP treatment. CONCLUSIONS: We suggest that a neuroinflammatory CSF profile after complete SCI could be suppressed with MP treatment via downregulating the expression of various cytokines.