

The state of the contralateral gastrocnemius muscle motor center in rats with unilateral sciatic nerve injury

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Abstract

The effects of unilateral crushing of the sciatic nerve on the spinal motor center of the contralateral gastrocnemius muscle were studied in rats. At 1, 5, and 10 days after nerve injury, the state of the center of the contralateral gastrocnemius muscle was assessed by paired-pulse monosynaptic testing and evaluation of the post-tetanic potentiation of its reflex response. The results identified changes in the excitability of the contralateral motor center in these conditions. Activation of reflex systems associated with injuries appears to promote a regenerative reorganization of motor control after trauma. © 2012 Springer Science+Business Media New York.

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Keywords

contralateral effects, motor center, nerve injuries