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Myelinated fibers of the mouse spinal cord after a 30-day space flight

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Abstract

© 2016, Pleiades Publishing, Ltd.Myelinated fibers and myelin-forming cells in the spinal cord at the L3–L5 level were studied in C57BL/6N mice that had spent 30 days in space. Signs of destruction of myelin in different areas of white matter, reduction of the thickness of myelin sheath and axon diameter, decreased number of myelin-forming cells were detected in “flight” mice. The stay of mice in space during 30 days had a negative impact on the structure of myelinated fibers and caused reduced expression of the markers myelin-forming cells. These findings can complement the pathogenetic picture of the development of hypogravity motor syndrome.

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