

## MRT- INITIAL SEGMENT AND SPASTICITY IN RATS WITH SPINAL TRANSECTION

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Spasticity affects 70% of patients with spinal cord injury and is characterized by hypertonia resulting from an excitatory/inhibitory imbalance with an up regulation of the excitatory control in the sub-lesional spinal cord.

The initial segment of the axon plays a key role in the physiology of the neuron, being in particular the place of initiation of the action potential. The first question is what happens at the initial segment of the axon after a spinal transection in rats? Is there modifications in the morphometry or innervation of the initial segment?

For this purpose, we study the characteristics of the initial segment before and after spinal cord injury in adult rats, as well as inhibitory and excitatory innervations in immunohistochemistry.