

Zonisamide protects motor neuron death against glutamate mediated neurotoxicity

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To determine the possible neuroprotective effect of zonisamide against glutamate mediated neurotoxicity, We analyzed the neuroprotective effect of zonisamide in organotypic cultures model of motor neuron degeneration. Treatment with glutamate alone showed significant loss of motor neuron. Co-treatment with glutamate and zonisamide showed death of motor neurons. These results show zonisamide may have neuroprotective effect against glutamate mediated neurotoxicity and this drug may have therapeutic strategy in cases with spinal motor neuron death, such as amyotrophic lateral sclerosis.

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