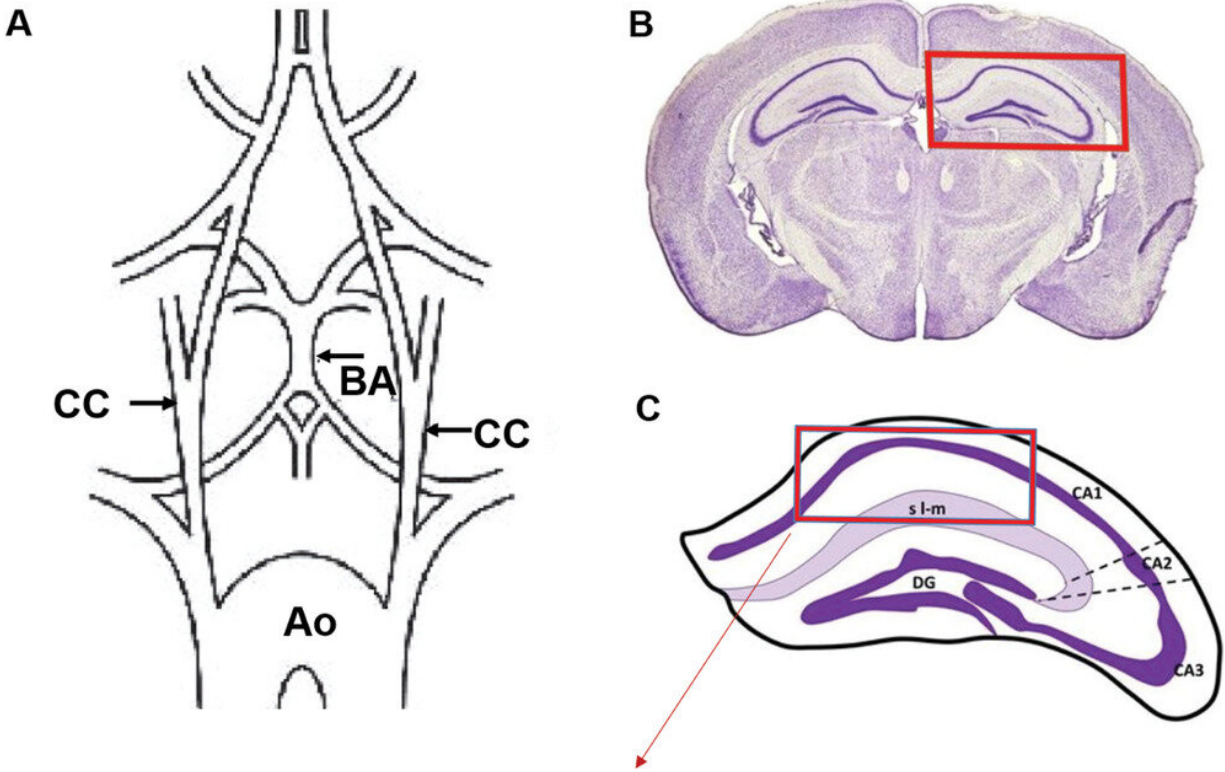
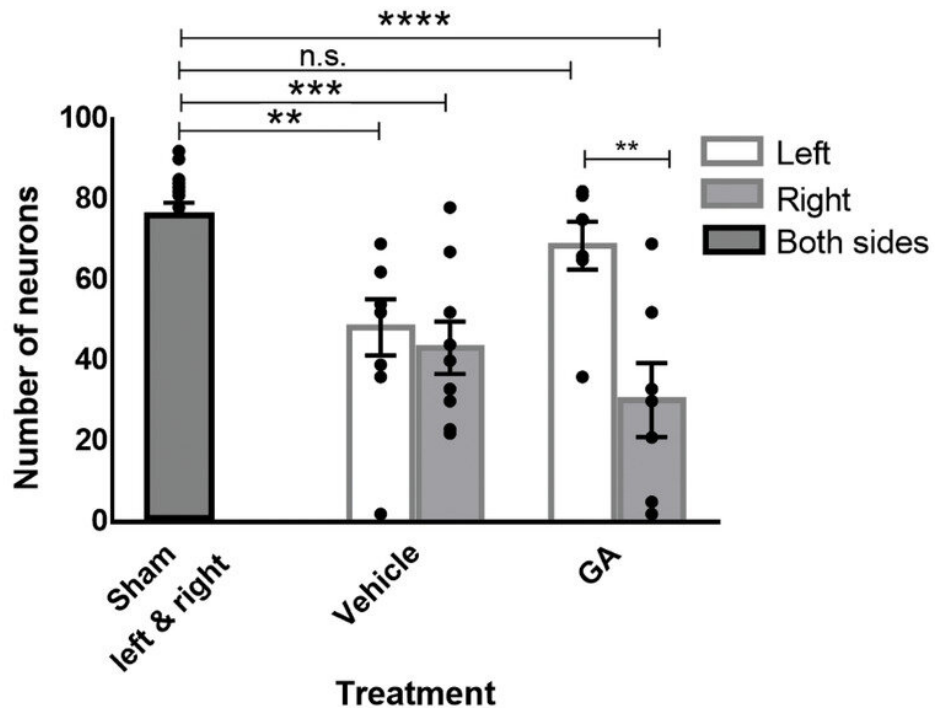


How a molecule from the worm *C. elegans* could protect the brains of stroke patients

December 14 2021



D Number of neurons in CA1a



Glycolic acid increases neuronal survival in the hippocampus of a global cerebral ischemia mouse model. A) Schematic illustration of the arterial brain supply indicating (arrows) the positions of transient clipping (for 7.5 min) to induce of global cerebral ischemia (GCI). B) GCI model affects the hippocampus, shown in the red rectangle. C) Neurons were quantified inside the area indicated by the red rectangle (cornu ammonis 1 [CA1] area). D) Number of neurons quantified after administration of 50 μ L glycolic acid (GA) or phosphate-buffered serum (PBS) immediately after ischemia at the moment of reperfusion through a catheter placed in the left carotid artery. The number of surviving neurons in the left CA1 was significantly lower in PBS-treated animals than in sham animals, but no significant difference was observed for the GA-treated group. In contrast, the right CA1, i.e., contralateral to the injection site, showed significant neuronal death in both PBS- and GA-treated animals, underscoring that the neuroprotective effect of GA is local. One-way analysis of variance followed by Dunnett's multiple comparisons test, **p

Citation: How a molecule from the worm *C. elegans* could protect the brains of stroke patients (2021, December 14) retrieved 12 May 2024 from <https://medicalxpress.com/news/2021-12-molecule-worm-elegans-brains-patients.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.