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Stroke (CVA) and Hydrogen Therapy

Research on Hydrogen Therapy for Stroke or Cerebro-Vascular Accident (CVA) patients suggests promising potential benefits in reducing brain damage and improving outcomes. Hydrogen, typically administered as Hydrogen-Rich Water or daily Hydrogen gas inhalation, has shown neuroprotective effects in pre-clinical and clinical trials.

Antioxidant Effects

One significant physiological mode of action is Hydrogen's antioxidant properties. When a Stroke occurs, the brain experiences oxidative stress due to an imbalance between the production of reactive oxygen species (ROS) and the body's antioxidant defences. This oxidative stress contributes to neuronal (nerve cell) damage and worsens Stroke outcomes. Hydrogen acts as a selective antioxidant, neutralising harmful free radicals and reducing oxidative damage to brain tissues. By doing so, Hydrogen Therapy may help limit the extent of brain injury caused by Stroke.

Anti-inflammatory Effects

Additionally, Hydrogen has anti-inflammatory effects that could benefit Stroke patients. Inflammation plays a crucial role in the secondary injury cascade following a Stroke, exacerbating tissue damage and impairing recovery. Hydrogen Therapy has been shown to suppress the production of pro-inflammatory molecules and promote the activity of anti-inflammatory ones, potentially attenuating inflammation in the brain and supporting the healing process.

Further research is necessary to establish best protocols and full effects of Hydrogen Therapy on Stroke patients. Initial studies, however, suggest that there is much potential from this natural, easily-accessible Therapy.

Ready to buy your own Hydrogen Water Bottle?

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Relevant Research Articles:

IOhsawa, I., Ishikawa, M., Takahashi, K., Watanabe, M., Nishimaki, K., Yamagata, K., Ohta, S., et al (2007). Hydrogen acts as a therapeutic antioxidant by selectively reducing cytotoxic oxygen radicals. *Nature Medicine*, 13(6), 688–694. <https://doi.org/10.1038/nm1577>

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Fu, Y., Ito, M., Fujita, Y., Ichihara, M., Masuda, A., Suzuki, Y., ... & Ohsawa, I. (2009). Molecular Hydrogen is protective against 6-hydroxydopamine-induced nigrostriatal degeneration in a rat model of Parkinson's disease. *Neuroscience Letters*, 453(2), 81–85. <https://doi.org/10.1016/j.neulet.2009.02.016>

Ostojic, S. M. (2013). Inadequate production of H₂ by gut microbiota and Parkinson disease. *Trends in Endocrinology & Metabolism*, 24(7), 289–290. <https://doi.org/10.1016/j.tem.2013.04.004>

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