NurAiD-II in stroke recovery: scientific reasoning and real-world evidence

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Background: NurAiD-II is an herbal supplement designed to help in ischemic stroke recovery. Lack of products in this field makes it mandatory to review the available evidence to decide about recommending it to patients who have suffered a brain infarction.

Methods: Review of related Medline literature and a primary stroke center experience were performed.

Results: Neuroprotection and neuroregeneration are NurAiD properties as basic research demonstrates: It increases brain-derived neurotrophic factor expression, inducing neuronal proliferation and synaptogenesis, it enhances vascular endothelial growth factor and angiogenesis, and in this way, enhances brain recovery after ischaemia in different animal models. Recent clinical trials including the multicentric Chinese Medicine NeuroAiD Efficacy on Stroke Recovery (n=1,100) reported a delayed but significant benefit in stroke patients who used it for three months after infarction OR 1.49 (1.11-2.01) and NNT=13 for modified Rankin scale 0-1 at 6 months, adding a significant reduction in fatal stroke recurrences (0% vs 0.7% at 3 months, p=0.045) and demonstrating an excellent safety profile. Poor prognosis factors in the total population as age>60, baseline NIHSS 10-14, stroke onset to initiation of treatment >48 hours and female sex were found to be positive predictive factors to obtain benefit of NurAiD-II. Finally, a primary stroke centre cases series (n=20) confirmed safety profile and suggested a benefit in patients who other way were not expected to improve as much as they did.

Conclusions: NurAiD-II enhances neurorestorative processes in preclinical models of stroke and clinically improves long-term functional recovery and reduces early vascular events after a stroke. A subgroup of patients with poorer prognosis factors is more likely to achieve a benefit. Although real-world experience seems to support these results, further registries are required to confirm them. Lack of other effective treatments to enhance rehabilitation-induced stroke recovery makes it reasonable to report the availability of NurAiD-II to patients and/or relatives.