



Research Article

Vinpocetine: Hype, Hope and Hurdles towards Neuroprotection

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ABSTRACT

The in progress research studies and the current knowledge about vinpocetine strongly suggest that “the one molecule fits for many at many times” This review provides a brief overview of vinpocetine for its pharmacokinetics, pharmacodynamics, uses, adverse effects and research summary. In theory, such an ideal “Vinpocetine” preferably known as nootropic is a very effective tool used in memory enhancement. Vinpocetine is a safe and non-toxic with a marvelous range of efficient and structural benefits for superior vigour. However, considering the pharmacokinetic study and uses of Vinpocetine it is a suitable candidate to develop various dosage forms for various disorders. Vinpocetine enhances brain circulation and oxygen consumption by dilating blood vessels and reducing blood stickiness. Vinpocetine is a potent inhibitor of the voltage-dependent Na⁺ channels and a selective inhibitor of the Ca²⁺/calmoduline-dependent phosphodiesterasethere. Both vinpocetine and its main metabolite cis-apovincaminic acid exert a neuroprotective type of action. Some hurdles may be produced due to Vinpocetine in the patients associated with Hypotension, Constipation and Seizure.

KEYWORDS: Vinpocetine, Neuroprotection, Memory Enhancement, Nootropic, Alzheimer’s Disease, Sundowning Syndrome