

No evidence for benefit of procaine in prevention or treatment of dementia

Clinical question	How effective is procaine on cognitive function in the treatment of people with dementia, and for healthy elderly people?
Bottom line	There is some evidence from older studies that procaine preparations might improve memory in people without cognitive impairment. However, the evidence for detrimental effects of procaine and its preparations is stronger than the evidence for benefits in preventing and/or treating dementia or cognitive impairment. There were few adverse events related to long term use of procaine but some were serious (migraine, systemic lupus erythematosus syndrome).
Caveat	Meta-analysis of beneficial outcomes was not appropriate due to the different preparations, durations and poor quality of trials. Most trials were performed before the 1990s and none reported any criteria for cognitive decline and dementia.
Context	Procaine is a controversial substance that has been used for "antiageing" effects, including cognitive improvement, for more than 50 years. Preparations which contain procaine as a component are claimed to prevent, reverse and interrupt dementia. Several products are widely promoted and can be purchased "over the counter" outside the US and via the internet. Procaine preparations are said to be readily available in over 70 countries and used by more than 100 million people worldwide.
Cochrane Systematic Review	Szatmari S and Bereczki D. Procaine treatments for cognition and dementia. Cochrane Reviews 2008, Issue 4. Article No. CD005993. DOI: 10.1002/14651858.CD005993.pub2. This review contains 3 studies involving 427 participants.
PEARLS 140, March 2009, Brian R McAvoy	

[References]

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