

A study on the rehabilitation of cognitive function and short-term memory in patients with Alzheimer's disease using transcutaneous electrical nerve stimulation.

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In some previous studies, transcutaneous electrical nerve stimulation (TENS) to the back was shown to improve non-verbal short-term and long-term memory as well as verbal fluency in patients in the early stage of Alzheimer's disease (AD). Moreover, the patients' physical, social and affective functions were also improved. In this study, the effects of TENS applied to the face were studied in patients with mild and severe AD. Fourteen patients with probable AD were used as subjects. To evaluate the effects of treatment, the subjects underwent two kinds of neuropsychological tests as well as a pupillary light reflex test. The pupillary light reflex test was chosen because it has been proven to show poorer results in cases of senile dementia. These three tests were carried out before the treatment, immediately after the treatment and 6 months after the treatment. Improvements were seen in subjects in the TENS groups and the effects of treatment were more significant in mild AD patients than in severe AD patients. However, the improvements were not maintained 6 months after the treatment. The possible mechanisms underlying the beneficial effects of TENS in AD patients are discussed in this paper.

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- [Clinical Trial](#)
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