Electrocortical therapy may prevent motion sickness

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(HealthDay)—A mild electrical current applied to the scalp—transcranial direct current stimulation (tDCS)—can prevent motion sickness, according to a study published online Sept. 4 in *Neurology*.

In the study, 20 volunteers underwent tDCS for about 10 minutes. They were then placed in a motorized chair that rotates and tilts, to simulate the motions that tend to make people sick on boats or roller coasters.

Participants who received tDCS took about 207 seconds longer to develop moderate nausea, compared with when they received sham treatment, the researchers found. Further, these people appeared to

recover faster from motion sickness.

"Following cathodal tDCS over the left hemisphere, we observed both an increased duration in the time taken to develop moderate nausea during off-vertical axis rotation and a more rapid recovery from symptoms. As no significant effects were observed during anodal stimulation, this excludes the role of both adaptation and nonspecific effects due to tDCS," the authors write. "We provide a novel treatment for motion sickness that is, so far, apparently free of side effects."

More information: Abstract
Full Text