

Electrical stimulation can ‘starve’ brain cancers, early study shows

Researchers have shown that electrical stimulation to the skull can starve brain cancers of vital nutrient-rich blood, opening the door to “brain zapping” as a new treatment for the often-fatal tumours.

Transcranial direct current stimulation (tDCS) applies a low intensity electrical current to the brain via electrodes on the scalp and is being investigated for a range of disorders including [depression](#), [speech loss after stroke](#), and the cognitive decline of [Alzheimer’s disease](#).

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A team from Harvard Medical School, US, and Italy’s University of Siena enrolled eight patients for the recent study. Six had glioblastomas – tumours that grow from the brain tissue itself – and two had metastatic cancers that had spread from the lung.

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Each patient then had 20 minutes of tDCS while in a functional MRI scanner, which can monitor blood flow in the brain.

For such a brief intervention, the results were dramatic.

Blood flow to the tumour reduced by an average 36%, ranging from 26% in the patients with glioblastoma to 45% for the patients with metastases. Apart from some reported tingling when the stimulation began, [which is common](#) in tDCS, there were no reported adverse effects.

Read full, original post: [Can ‘brain zapping’ tackle tumours?](#)