

Choice of seizure drug for brain tumor patients may affect survival

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New research suggests brain tumor patients who take the seizure drug valproic acid on top of standard treatment may live longer than people who take other kinds of epilepsy medications to control seizures. The research is published in the August 31, 2011, online issue of *Neurology*, the medical journal of the American Academy of Neurology.

"Despite some limitations, our results suggest that the choice of seizure medications in brain tumor patients should be carefully considered as it may give people a few more months with their loved ones," said study author Michael Weller, MD, with the University Hospital Zurich in Switzerland and a member of the American Academy of Neurology.

Seizures occur in up to half of all people with glioblastomas, the most common and most [malignant brain tumor](#) in adults. For those patients with seizures, treatment with one of several epilepsy drugs is highly recommended. After surgery, standard treatment for patients with newly diagnosed glioblastoma is [radiation therapy](#) together with the chemotherapy drug temozolomide.

For this study, researchers with the European Organization for Research and [Treatment of Cancer](#) (EORTC) and the National Cancer Institute of Canada Clinical Trials Group (NCIC) analyzed the use of epilepsy drugs by 573 brain tumor patients who had been enrolled in a clinical trial evaluating radiation therapy with and without temozolomide. When treatment started, 175 were not taking a seizure drug, while 398 patients were on anti-seizure medicine, including 97 patients who were taking

valproic acid as their sole anti-seizure medication.

While the study showed that patients being treated with both chemotherapy and radiation fare better, those patients who also received valproic acid as medication for seizure prevention had an even further improved outcome, living an average of three months longer compared to those not receiving the drug.

While survival increased, people taking valproic acid in addition to radiation therapy and temozolomide were more likely than the other groups to experience a drop in blood platelets and white blood cells, which can increase a person's risk of bleeding and infection.

Taking valproic acid did not benefit survival in the group that received radiation therapy alone without temozolomide. Weller said that the use of valproic acid and other drugs with a similar mechanism should be further studied in order to determine whether and why [valproic acid](#) may help patients who are receiving radiation therapy and [temozolomide](#) live longer.

Provided by American Academy of Neurology

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