

Lay summary

BRAIN UK Ref: 20/012

Novel markers of seizure susceptibility in Glioblastoma progression.

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Glioblastoma multiforme (GBM) remains the deadliest of brain cancers. We still have no cure for it, and most patients die within a year of falling unwell. Unfortunately, many patients with GBM experience seizures. These can be both unpredictable and at times dangerous, making it difficult for patients to feel like they can make the most of life. However, our group of researchers are worried that seizures deal a double-blow. We think that the electrical activity that goes into overdrive in the brain when a person is having a seizure, might actually cause tumours to grow faster. In particular, we wonder if electrical activity releases proteins that make seizures more likely. We wonder if the tumour uses seizures and these proteins as a tool to help it grow and spread. We want to test if this is the case, and understand how seizures might cause tumour growth. If we can understand this, we might be able to design a treatment that stops GBM in its tracks. This could allow patients to live a longer life, free of some of the unpleasant symptoms of this terrible cancer.