

Cannabis extract can have dramatic effect on brain cancer, says new research

November 17 2014, by Howard Wheeler



The new research by specialists at St George's, University of London, studied the treatment of brain cancer tumours in the laboratory and discovered that the most effective treatment was to combine active chemical components of the cannabis plant which are called cannabinoids.

Two of these called tetrahydrocannabinol (THC) and cannabidiol (CBD) were tested as part of the research into [brain cancer](#) which is particularly difficult to treat and claims the lives of about 5,200 each year. It also has a particularly poor prognosis as the rate of survival after five years of patients' diagnosis is around 10%.

Cannabinoids are the active chemicals in [cannabis](#) and are also known more specifically as phytocannabinoids. There are 85 known

cannabinoids in the cannabis plant.

The new research is the first to show a drastic effect when combining THC and CBD with [irradiation](#). Tumours growing in the brains of mice were drastically slowed down when THC/CBD was used with irradiation.

Dr Wai Liu, Senior Research Fellow and lead researcher on the project, said: "The results are extremely exciting. The tumours were treated in a variety of ways, either with no treatment, the cannabinoids alone, and irradiation alone or with both the cannabinoids and irradiation at the same time.

"Those treated with both irradiation and the cannabinoids saw the most beneficial results and a drastic reduction in size. In some cases, the tumours effectively disappeared in the animals. This augurs well for further research in humans in the future. At the moment this is a mostly fatal disease.

"The benefits of the [cannabis plant](#) elements were known before but the drastic reduction of brain cancers if used with irradiation is something new and may well prove promising for patients who are in gravely serious situations with such cancers in the future."

The research team are discussing the possibility of combining [cannabinoids](#) with irradiation in a human clinical trial.

The research has been published in the *Molecular Cancer Therapeutics* journal.

Provided by St. George's University of London

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