Abstract: The purpose of this study was to investigate the effects of treatment with water, n-butanol and ether extracts of Hypericum perforatum L. on epileptogenesis in rabbits. Animals from the control group received solvent-ethanol, and the kindling model of epilepsy was used. Epileptic focus was induced in Chinchilla rabbits by stimulation of the hippocampus. The following parameters were determined: the minimum current strength necessary to induce after-discharge (AD) – discharges appearing after cessation of stimulation; AD duration; the number of stimulations necessary to induce spontaneous kindling; and the latency time for the development of full kindling. The results obtained indicate that epileptogenesis is influenced by Hypericum perforatum L. extract treatment. Animals treated with an ether extract of Hypericum perforatum L. required significantly weaker minimum current strengths for the development of epileptogenic focus, and displayed longer AD times, while the number of electro-stimulations necessary for full kindling was less. In contrast, animals treated with water and n-butanol extracts required increased electro-stimulations for the development of epileptic discharge, and displayed shortened AD durations versus controls.

Keywords: St. John’s wort; Hypericum perforatum L.; extracts; kindling; epilepsy; rabbits

![Graph showing latency and full kindling epilepsy percentages](image-url)