## Abstract

This thesis describes neural and genetic basis of epilepsy, addresses the distribution of epileptic sezuries, which genes affect epilepsy and the connection between epilepsy and the nervous system. The thesis is based on data collection from scientific books, partly from data published by hospitals. Its focus is getting from the general expressions to the cellular level of the problem, which is necessary to clarify the epileptic principles. It also deals with the genetic nature of epilepsy, as it is with the inheritance of the disease and deals in more detail with early infantile epileptic. The beginning of work is about basic information of epilepsy. Next, it looks into the mechanisms that influence the emergence of epilepsy. Continues to look at the structures in the brain associated with epilepsy. And at the end, it deels with genetic nature of epilepsy. A brochure was created for this work, where basic information about epilepsy can be found, first aid for an epileptic seizure and early infantile epileptic encephalopathy is discussed in paragraphs.