Epilepsy is one of the most common diseases of the nervous system . life Patients suffering from this disease is affected differently by frequent seizures, as well as side effects of antiepileptic drugs. In addition, there is a large group of people (20 -30 % of patients ), the disease can not be contained by any of the known drugs. This group is trying to help the neurosurgical teams and where possible attempts to remove the zone responsible for the seizure . Before it is However , the patient should undergo full spectrum of investigative processes place suitable for operation in the most specify. The human brain is still hides many unknowns and its detailed work , scientists still secret. our The challenge is therefore to try to find methods to understanding its functioning. It must be in mind that , in examining still a human being and should be located method of the least invasive and minimally intrusive for patients .

This work focuses on diagnostics detail epileptogenic zones in patients with type temporal epilepsy (TLE ) using the nuclear Medicine - Positron emission tomography (PET). This is a noninvasive method , but the operation of expensive and limited availability. With differentiation various metabolic demands epileptic tissue compared with healthy tissue brain PET can lateralizovat diseased side and help in decision-making on such an important surgery , such as surgical removal of part of the brain tissue.