

**COMPARISON OF DIFFERENT SPECT IMAGES ANALYSIS METHODS
FOR INTER-HEMISPHERIC ASYMMETRY DETECTION IN PATIENTS
WITH EPILEPTIC SYMPTOMS**

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Abstract

The aim of this work was examination of asymmetries in activity of the left and right cerebral hemispheres as well as localization and contouring of the regions of reduced or increased activity on the basis of single photon emission computed tomography (SPECT) images.

The mean and standard deviation of normalized intensities inside the contoured areas of images, entropy based on intensity histograms and Chen's fractal dimension were calculated.

Keywords: SPECT, epilepsy, fractal dimension, entropy