

Effect of ketogenic diet on motor function after acute ischemic stroke in rats

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Abstract

Introduction

Ischemic stroke is the third cause of death in the world and one of the main causes of disability for its victims. Ketogenic diet which has been used since centuries ago for epilepsy treatment, recently has been used for various neurological disorders with some success. In ischemic stroke few studies has been done.

Aim of study

To evaluate ketogenic diet effect on motor function after acute ischemic stroke model in rat.

material and methods

In this study 24 male rats weighted 240-280 grams used in three main, sham and control groups. To the main group ketogenic diet was fed for 10 days. After that with endothelin -1 ischemic stroke was induced in main and control groups and motor function was tested in them.

results

Motor function was tested in rats by beam test, cylinder test and step adjusting test. In ketogenic diet group it was shown that motor function was better meaningfully after stroke than the other two groups

conclusion

Using ketogenic diet can reduce the injury of ischemic stroke and and lowers the motor impairment after the stroke event.

Key words

Ischemic stroke ,ketogenic diet ,cylinder test ,step adjusting test ,beam test.