RECCURENT STROKE PREVENTION METHODS COMPARISON: PATENT FORAMEN OVALE CLOSURE OR MEDICAL THERAPY?

Gorlenko K., Kiselev G., Valuev G., Popova E.

Sechenov First Moscow State Medical University, Moscow, Russia
mr.gorlenko@mail.ru

Key words: *recurrent stroke, patent foramen ovale, device closure, medical therapy*

Background. Recent studies have shown correlation between recurrent stroke occurrence and patent foramen ovale (PFO). Its occurrence causes paradoxical embolism following recurrent stroke as the most likely mechanism which consists of thrombus transfusion through PFO from right to left atria.

Aim. To compare safety and efficiency of PFO closure and medical therapy alone for preventing recurrent stroke.

Material and Methods. We had a look into the matter of NCBI PubMed, Elsevier, Scopus, Embase and the Cochrane Central Register of Control Trials databases.

Results and Discussion. Common model of closure device consists of 2 discs connected by thin waist. There are 3 main complications in case of closure devices usage: thrombus formation on the side of device or in the left auricle; device subunit erosion which leads to abrasion at the roof of the atria or aorta and pericardial effusion; atria fibrillation which results in disturbances of heart cycle what leads to lack of ventricle blood supply and heart failure. Device closure results in a significant reduction in recurrent stroke (49%). Trivial medical treatment program contains usage of aspirin, low molecular weight heparin and warfarin. The most important complications in the subject of this method are bleedings, neuphrotoxicity and Reye syndrome. Reduction in recurrent stroke is 25%.

Conclusions. Although per cent of recurrent stroke reduction with device closure of PFO is exponentially higher, there are a lot of severe complications which can damage patient's health. The efficiency of PFO closure may be increased by anticoagulant therapy using, for example with clot deformation on the sides of the device.

THE DEPENDENCE OF THE LIVER VOLUME ON THE TYPE OF PHYSIQUE ACCORDING TO THE DATA OF SPIRAL COMPUTED TOMOGRAPHY AND SECTIONAL STUDY

Gubar A. S., Chaplygina E. V., Kaplunova O. A.

Rostov State Medical University, Rostov-on-Don, Russia
alexandrgubar@rambler.ru

Key words: *liver, spiral computed tomography, anthropometric data*

Aim. Based on the data obtained during the spiral computed tomography (SCT) and autopsy, to determine the volume of the liver of the examined persons, taking into account the type of physique, followed by a comparison of the results.

Material and Methods. Computer tomograms of 205 people of both sexes of the youth and the first period of adulthood were analyzed. The examined persons were divided into 3 groups in accordance with the classification of L. Rees — H. J. Eysenck (1945) both during the spiral computed tomography and during the sectional studydepending on body type. For each group, the volume of the liver was determined, followed by a comparison of the results.

Results and Discussion. The volume of the liver in conducting SCT was the highest among the examined individuals endomorph body type (1590.8±43.3 cm^3), minimum — in persons of ectomorph body type (1164.9±41.7 cm^3), the persons of mesomorph body type (1338.7±21.4 cm^3) occupied intermediate values. The volume of the liver on autopsy was maximal at dead people endomorph body type (1748.3±22.1 cm^3), minimum — in the dead of ectomorph body type (1348.2±31.5 cm^3), dead mesomorph body type of the obtained intermediate values (1538.8±31.1 cm^3). Differences between the groups were statistically significant ($p<0.05$).

Conclusions. During the SCT, significant differences between groups of people with different body types were established, which was confirmed during the sectional study. Taking into account the anthropometric data of the individual will allow to avoid errors in the interpretation of the data obtained during the spiral computed tomography of the liver anatomy.

THE FREQUENCY OF OCCURRENCE OF DIFFERENT ANATOMICAL VARIANTS OF THE LIVER POSITION IN THE ABDOMINAL CAVITY ACCORDING TO THE DATA OF SPIRAL COMPUTED TOMOGRAPHY

Gubar A. S., Chaplygina E. V., Kaplunova O. A., Sukhanova O. P., Blinov I. M.

Rostov State Medical University, Rostov-on-Don, Russia
alexandrgubar@rambler.ru

Key words: *liver position, abdominal cavity, spiral computed tomography*

Aim. Based on the data, obtained during the spiral computed tomography, to determine the frequency of occurrence of different anatomical variants of the liver position in the abdominal cavity of the examined persons.

Material and Methods. Computer tomograms of 205 people of both sexes of the youth and the first period of adulthood were analyzed. The examined persons in accordance with the classification of Voilence V. N., Medelyan A. I., Omelchenko V. M. (1965) were divided into 6 groups depending on the anatomical variant of the