

International medical review

Researchers compared the efficacy and safety of Rapixaban and aspirin in patients with subclinical atrial fibrillation (AF).

During 3.5 years of follow-up, the incidence of stroke or systemic embolism was 0.78 % per patient-year in the apixaban group and 1.24 % per patient-year in the aspirin group. The risk of these complications was reduced by 37 % with apixaban.

Data were analyzed from 4012 patients with subclinical AF lasting from 6 minutes to 24 hours. The mean age of the participants was 77 years. All patients were divided into two groups according to the prescribed treatment: oral apixaban at a dose of 2.5-5 mg twice daily or aspirin at a dose of 81 mg daily. The average follow-up period was 3.5 years.

According to The New England Journal of Medicine

Researchers assessed the health risks associated with prolonged sedentary time at work and determined whether there was a threshold of physical activity that could reduce them.

The analysis showed that people with mostly sedentary jobs had a 34 % higher risk of cardiovascular disease mortality and a 16 % higher risk of all-cause mortality compared with participants with mostly active, non-sitting jobs.

The authors concluded that for people with predominantly sedentary jobs, increasing the amount or intensity of daily physical activity may be beneficial in reducing the risk of cardiovascular and all-cause mortality.

According to the JAMA Network Open

Cardiac surgeons at the Mariinsky Hospital combined and modified two methods known in world clinical practice to restore the aortic valve function and performed the first operation. The procedure was called FLOZ.

The intervention was required for a 76-year-old patient who had a significantly enlarged aortic root and aortic stenosis, making it difficult to find a mechanical or biological prosthesis of the appropriate size.

According to experts, after such a complex surgical procedure, recovery is quite fast and the valve functions as a native one on the first day after surgery.

According to the materials of the press service of the St. Petersburg Health Care Committee

A new approach has been developed to predict the progression of aortic aneurysms based on the assessment of vessel wall fluctuations.

Scientists have developed a new method of assessing aortic aneurysms using a physiomechanical — the stability of vessel wall fluctuation.

Abnormal dilation of the aorta leads to the appearance of unstable fluctuations of the vessel wall. In this case, the transition from stable blood flow to unstable depends on the pressure level, aortic size, flow shear stress and rigidity of the vascular wall.

The analysis showed that the appearance of unstable vessel wall fluctuations serves as a physiomechanical of aneurysm progression in the ascending thoracic aorta, which predicts aneurysm growth over the next 3 years with 98 % accuracy.

According to the Nature Biomedical Engineering Journal

Experts at the University of Glasgow have studied the effect of the presence of gout on the risk of developing cardiovascular diseases.

The results of the study show that patients with gout had a 58 % higher overall risk of cardiovascular disease than participants in the control group.

When assessing the morbidity by age group, patients with gout younger than 45 years of age were most at risk: they had a 2.22-fold increased risk of cardiovascular disease.

According to The Lancet

Researchers at Harvard Medical School studied 24 plasma biomarkers in patients with rheumatoid arthritis to determine how their levels relate to arterial wall inflammation, an indicator of cardiovascular risk.

The analysis showed that changes in the levels of six of 24 plasma markers — serum amyloid protein A, C-reactive protein, tumor necrosis factor receptor type 1, adiponectin, osteoprotegerin, and chitinase-3-like protein 1 (also known as YKL-40) — were associated with arterial inflammation.

The authors concluded that the six new biomarkers could be used to predict cardiovascular risk in patients with rheumatoid arthritis.

According to the JAMA