

International medical review

Researchers sought to examine the relationship between high (>65%), normal (55–65%), and low (<55%) left ventricular ejection fraction (LVEF) and long-term all-cause mortality and major adverse cardiovascular events (MACE) in women with suspected myocardial ischemia.

A total of 734 women enrolled in the Women's Ischemia Syndrome Evaluation (WISE) program were analyzed. LVEF was calculated by invasive left ventriculography. The relationship between baseline characteristics, LVEF, and outcomes was assessed. A multivariable Cox regression model was used to assess the association of LVEF with outcomes after the adjustment for known risk factors.

Low LVEF was associated with higher mortality and MACE compared to normal and high LVEF ($p < 0.0001$).

As women are known to have relatively higher LVEF compared to men, a sex-neutral LVEF threshold continues to be used for clinical management.

According to the Heart journal

Researchers at a clinic in Belgium evaluated the effectiveness of artificial intelligence (AI)-based software in detecting abnormalities in left ventricular ejection fraction (LVEF) after anthracycline-based chemotherapy.

The study included 989 women without cardiovascular diseases who received anthracycline-based chemotherapy for breast cancer without metastases.

All patients were monitored by ECG and had transthoracic echocardiography before and after the treatment. The diagnostic efficiency of the developed software was evaluated on the basis of ECG registration by the values of the area under the curve (AUC) at LVEF less than 50%.

According to the European Journal of Preventive Cardiology

According to a study, there is no association between the prescription of fluoroquinolones and the likelihood of aneurysm or aortic dissection. It is not recommended to avoid prescribing fluoroquinolones when clinically indicated.

Specialists evaluated the incidence of hospitalization and in-hospital mortality with a main clinical diagnosis of aortic aneurysm or aortic dissection.

The incidence rate of aortic aneurysm or dissection was higher in the cephalosporin group during the treatment period compared to the control period.

The overall incidence rate was 5.4 per 100,000 person-years in the fluoroquinolone group and 8.47 per 100,000 person-years in the third-generation cephalosporin group.

According to the European Heart Journal

Researchers at the US National Institutes of Health (NIH) have examined the relationship between gaining too much or too little weight during pregnancy and mortality.

They found that weight gain below recommended levels was associated with reduced diabetes-related mortality, but only in a subpopulation of women with normal pre-pregnancy weight.

A total of 46,042 women were included in the study. After 52 years of follow-up, 17,901 participants (38.9%) had died.

According to The Lancet journal

A group of Chinese scientists examined the relationship between atrial fibrillation (AF) and the likelihood of developing dementia.

Compared to participants without AF, patients with this pathology had a 42% higher risk of developing any type of dementia and a 2.06 times higher risk of vascular dementia.

The UK Biobank database was analyzed and 433,746 people without dementia at baseline were identified. AF was found in 30,601 participants.

The researchers note the importance of monitoring cognitive function in patients with atrial fibrillation in order to take timely action to reduce the risk of dementia.

According to the JAMA Network

Tomsk researchers have published the results of a large-scale project to find ways to effectively reduce blood glucose in animals with type 2 diabetes. They managed to find a non-medicamentous way of treating this disease.

The animals got rid of the diabetes with the help of physical training, which was correctly selected by experts for a certain period of time.

The project involved 300 experimental animals, and special equipment was made. Data analysis helped to determine the optimal time for physical training, which most effectively reduces the concentration of blood sugar.

According to the International Journal of Molecular Science