

## International medical review

Specialists from medical centres in the US, Canada and Europe evaluated the effectiveness of transcatheter aortic valve repair for tricuspid regurgitation.

The study involved 350 patients with severe tricuspid regurgitation. They were divided into two groups: the first group underwent transcatheter edge-to-edge tricuspid valve repair (TEER) and the second group received drug therapy.

Patients who underwent transcatheter repair had a 48% lower risk of adverse outcomes than those who received drug therapy.

*According to the MEJM journal*

Researchers have determined the optimal level of systolic blood pressure that should be maintained in patients with type 2 diabetes to reduce the risk of cardiovascular disease (CVD).

The researchers registered 7.799 major cardiovascular events and 4.130 CVD-related deaths. The average systolic blood pressure level achieved after taking antihypertensive medication ranged from 117 to 144 mmHg, and the researchers found that a reduction in all-cause mortality was already achieved when systolic blood pressure levels were below 140 mmHg, with no additional benefit from further reduction.

*According to the Hypertension journal*

Researchers from the Southern Medical University in China studied the effect of phone calls on the incidence of hypertension.

Mobile phone users were 7% more likely to develop high blood pressure than non-users. Participants who talked on their mobile phones for 30 minutes or more per week were 12% more likely to develop high blood pressure than those who spent less time on the phone.

Participants who used a mobile phone to make or receive calls at least once a week were considered mobile phone users. The average age of the participants was 64 years.

*According to the European Heart Journal*

A study by the US researchers has shown that depression during pregnancy increases the likelihood of cardiovascular disease after childbirth.

The presence of antenatal depression increased the risk of coronary heart disease among all participants by 83%, and arrhythmia or cardiac arrest by 60%. It also increased the likelihood of cardiomyopathy by 61% and arterial hypertension by 32%.

Participants without hypertensive disorders during pregnancy were 84% more likely to develop CHD, 42% more likely to have a stroke, and 85% more likely to have an arrhythmia or cardiac arrest.

*According to the JAHA journal*

According to the researchers, the risk of ischaemic stroke and major circulatory embolism appeared to be increased in women with atrial fibrillation (AF) who were vaccinated against COVID-19. A similar association was not confirmed in men. Vaccination had no effect on bleeding development.

At the same time, an increased risk of ischaemic stroke or systemic embolism after COVID-19 was observed in this population in both women (17.42-fold) and men (6.63-fold).

Given the increased risk of these complications after COVID-19, prophylactic vaccination is recommended for patients with atrial fibrillation.

*According to the European Heart Journal*

A group of researchers has found that the continuation of beta-blockers for more than one year after a myocardial infarction (MI) in patients without heart failure or left ventricular systolic dysfunction does not improve cardiovascular outcomes.

The analysis showed that the odds of cardiovascular complications and death were similar between participants who continued to take beta-blockers and those who did not during the 4.5 years of follow-up (adjusted odds ratio was 0.99).

The study included 43.618 patients who had myocardial infarction, with or without ST elevation, between 2005 and 2016.

*According to the Heart journal*

The researchers assessed the outcomes of intensive drug-assisted blood pressure lowering treatment in older adults admitted to hospital for different conditions, except for cardiovascular disease

Intensive hypotensive therapy raised the likelihood of all negative outcomes by 28%. Meanwhile, intravenous hypotensive drugs augmented this likelihood by 90%.

Data from 66.140 elderly patients hospitalized with non-cardiac conditions who had an increased blood pressure during the first two days of hospitalization were analysed. The participants had an average age of 74 years.

The researchers highlighted that the results do not suggest a requirement for intense reduction in blood pressure for elderly patients after the hospitalization. Additionally, the results indicate a necessity for further research to establish revised target blood pressure levels in these cases.

*According to the Circulation journal*