Scientists of the Surgut State University (SURGU) have developed a combined approach to predicting complications after a heart attack. The technique combines the international Grace 2.0 scale with an analysis of biological markers in the blood of patients.

Now doctors use several shirts to evaluate risks, but they are based on foreign data and are not always accurate for Russian patients. In addition, these methods do not take into account molecular indicators that can signal the possible problems.

Scientists focused on two markers – ST2 protein and peptide copeptine. Their level increases with overloading the heart muscle. The study showed that the excess of threshold values (36.5 ng/ml for ST2 and 3 ng/ml for copepin) indicates a high risk of complications.

According to Anton Vorobyov, the associate professor of the Cardiology Department of SurGU, observation of patients for four years made it possible to establish clear evaluation criteria. He noted that a new approach helps to identify patients who require more intense observation and individual therapy.

Development allows not only to more accurately predict complications, but also to personalize treatment. In the future, the method can be combined with telemedicine technologies for remote monitoring of patients from risk group.

The study was conducted in conjunction with medical institutes from Novosibirsk, Kemerovo and Surgut as part of the "Life Code" project "Priority 2030".

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