

The aim of this study to determine the influence of age on the probability of postoperative regurgitation in patients of different age groups.

Methods. A single-centre retrospective study included 720 patients who underwent aortic valve neocuspidalisation surgery in Penza. Patients were divided into three groups according to age by WHO classification. Among them — 60 patients of young age group, 166 patients of middle age group and 494 elderly patients who underwent this procedure between 2015 and 2022.

Results. According to the data of our center, postoperative regurgitation occurred in 54 patients from different age groups. Univariate regression analysis was performed to identify the significance of patient age as a predictor of postoperative regurgitation. The analysis revealed a statistically significant increase in the probability of regurgitation in younger patients. Increasing the age by 1 year decreases the probability of regurgitation by 3 % (OD=0.970; p=0.03).

Conclusion. Neocuspidalisation surgery shows good longterm results. Younger age can be considered as a risk factor for postoperative regurgitation.