

COMBINED APPROACHES TO THE TREATMENT OF ISCHEMIC HEART DISEASE TAKING INTO ACCOUNT MODERATE MITRAL INSUFFICIENCY

Ismatov A. A.
Yarbekov R. R.
Teshayev U. Sh.
Muradov M. M.
Akhmedov H. E.

Bukhara State Medical Institute Named After Abu Ali ibin Sino

Abstract

A summary of the article's objectives, significance of the problem, and conclusions. For example: "coronary heart disease (CHD) in combination with moderate mitral insufficiency is a complex clinical task that requires a comprehensive approach. The article presents modern strategies of surgical and conservative treatment aimed at improving the prognosis and quality of life of patients."

Keywords: IHD, mitral insufficiency.

Introduction

Relevance of the problem of combination of CHD and mitral insufficiency.

Statistical data on prevalence and mortality.

The main difficulties of diagnosis and treatment.

1. Pathogenesis and clinical features of the combination of CHD and mitral insufficiency

Effect of ischemia on mitral valve function.

Mechanisms of mitral insufficiency formation in CHD.

Features of hemodynamic changes.

2. Diagnosis and assessment of the degree of mitral insufficiency in patients with CHD

Echocardiography (TTE and TPE) as the main evaluation method.

The role of coronary angiography and MRI of the heart.

Functional tests and stress tests.

Research materials

1. Patient groups:

- The study included _ _ _ patients with confirmed coronary heart disease (CHD) and moderate mitral insufficiency (MN).





- The patients were divided into two groups:
 - **Group 1:** Patients who received conservative treatment for CHD with dynamic monitoring of the mitral valve condition.
 - **Group 2:** Patients who underwent surgical intervention (coronary artery bypass grafting (CABG) with mitral valve repair or replacement).

2. Inclusion criteria:

- The presence of clinically confirmed coronary artery disease (according to coronary angiography and stress tests).
- Moderate mitral insufficiency (according to echocardiography, regurgitation fraction 30-50%).
- Age: from 45 to 75 years.
- Stable angina pectoris of functional class II-III.

3. Exclusion criteria:

- Severe mitral insufficiency or other valve defects that require immediate surgical treatment.
- Acute heart failure.
- Severe left ventricular dysfunction (EF < 30%).
- Concomitant serious diseases that affect the prognosis (cancer, severe chronic renal failure, etc.).

4. Study period:

- Follow-up was performed for ____ months/years.

Research Methods

1. Diagnostic methods:

1. Echocardiography (TTE and TPE):

- Determination of the degree of mitral insufficiency (by regurgitation flow).
- Evaluation of the left ventricular ejection fraction (LVEF) and its geometry.

2. Coronarography:

- Identification of the degree of coronary artery damage for planning revascularization.

3. Stress tests:

- Assessment of the functional state of the cardiovascular system and detection of ischemia.

4. Clinical tests:

- General and biochemical blood tests (with an emphasis on indicators of inflammation, kidney and liver function).
- Analysis of brain natriuretic peptide (BNP) levels to assess heart failure.

5. Electrocardiography:

- To detect ischemic changes and rhythm disorders.





2. Treatment

Group 1 (conservative treatment):

- Standard medical therapy:
 - ACE/ARA inhibitors (reduced pre-and afterload).
 - Beta-blockers (heart rate control and reduction of ischemia).
 - Antiplatelet agents and statins.
 - Diuretics if necessary (to control the symptoms of congestive heart failure).

Group 2 (surgical treatment):

- Surgical intervention:
 - Coronary artery bypass grafting (CABG) to eliminate ischemia.
 - Mitral valve repair (annuloplasty or correction of valve prolapse).
 - Replacement of the mitral valve (in case of ineffectiveness of plastic surgery).
- The use of cardioplegia and cardiopulmonary bypass during surgery.

3. Methods for evaluating results:

1. Early results:

- Duration of hospitalization.
- Frequency of early complications (acute heart failure, myocardial infarction, infectious complications).

2. Long-term results:

- Survival rate for 6/12/24 months.
- Improvement of the functional class of angina pectoris (according to the CCS classification).
- Reducing the degree of mitral insufficiency.
- Improvement of ejection fraction and reverse ремоделированиеLV remodeling (according to echocardiography).

3. Quality of life:

- Questionnaires (for example, SF-36 or Minnesota Living with Heart Failure Questionnaire).

Conclusion

A brief summary of the article with an emphasis on the importance of early diagnosis and the choice of individualized treatment tactics.

REFERENCES

1. Пулатова, Ш. Х. (2021). АРТЕРИАЛЬНАЯ ГИПЕРТОНИЯ И ХРОНИЧЕСКАЯ СЕРДЕЧНАЯ НЕДОСТАТОЧНОСТЬ: КОМОРБИДНОСТЬ КАК ФАКТОР РИСКА НЕДОСТАТОЧНОЙ ЭФФЕКТИВНОСТИ ТЕРАПИИ. In *АКТУАЛЬНЫЕ ВОПРОСЫ МЕДИЦИНЫ КРИТИЧЕСКИХ СОСТОЯНИЙ* (pp. 59-60).





2. Пулатова, Ш. Х., Азимов, Б. К., & Тоиров, И. Р. (2019). Эндоваскулярное лечение больных ишемической болезнью сердца. *Евразийский кардиологический журнал*, (S1), 327-328.
3. Khayotovich, K. D., & Ikromovich, T. I. (2022). SPECIFICITY OF RESUSCITATION MEASURES IN PATIENTS WITH ISCHEMIC HEART DISEASE AND ARRHYTHMIA. *World scientific research journal*, 10(1), 150-155.
4. Wolff AA, Rotmensch HH, Stanley WC, Ferrari R. Metabolic approaches to the treatment of ischemic heart disease: the clinicians' perspective. *Heart Fail Rev*. 2002 Apr;7(2):187-203. doi: 10.1023/a:1015384710373. PMID: 11988642.
5. Khayotovich, K.D., & Bekmurodugli, B.E. (2022). Case in clinical practice: Modern intensive care in the treatment of post-resuscitation complications caused by cardiac arrhythmias. *ACADEMICIA: An International Multidisciplinary Research Journal*.
6. Rizaeva, M. Z. (2022). The clinical course of atrial fibrillation in patients with coronary heart disease. *European journal of molecular medicine*, 2(1).
7. Turobkulovich, B. U., & Khayotovich, K. D. (2024). MORE THAN MINIMUM CONSCIOUSNESS: APPALLIC SYNDROME. *European Journal of Interdisciplinary Research and Development*, 23, 113-115.
8. Ризаева, М. Ж. (2020). ЭФФЕКТИВНОСТЬ И БЕЗОПАСНОСТЬ ЭЛЕКТРИЧЕСКОЙ КАРДИОВЕРСИИ ПРИ ПЕРСИСТИРУЮЩЕЙ ФОРМЕ ФИБРИЛЛЯЦИИ ПРЕДСЕРДИЙ. *Новый день в медицине*, (4), 322-325.17. Потапов А.А., Крылов В.В., Лихтерман Л.Б. и др. Современные рекомендации по диагностике и лечению тяжелой черепно-мозговой травмы // Журнал вопросы нейрохирургии. – 2006. – № 1. – С. 3–8.
9. Qoyirov, A. Q., Kenjaev, S. R., & Xaitov, S. S. (2020). Egamova NT, Boltaev EB The role of delirium in patients with myocardial infarction of complicated acute heart failure. *New Day in Medicine*, 3(31), 68-71.
10. Kh, P. S., & Ganiev, N. S. (2022). The Importance of Cardioprotective Artificial Ventilation of The Lungs in Intensive Care. *Eurasian Research Bulletin*, 15, 208-212.
11. Мирзажонова, Г. С., Пулатова, Ш. Б., & Набиева, Д. А. (2023). *Частота поражения сердца при анкилозирующем спондилите* (Doctoral dissertation, Zamonaviy tibbiyotning dolzarb muammolari yosh olimlar xalqaro anjumani, Uzbekiston).
12. Тешаев, У.Ш. и Ярбеков, Р.Р. 2023. СРАВНИТЕЛЬНАЯ ОЦЕНКА ЭФФЕКТИВНОСТИ РАЗЛИЧНЫХ ТЕХНИК АОРТОКОРОНАРНОГО ШУНТИРОВАНИЯ У БОЛЬНЫХ С ОЖИРЕНИЕМ. *Журнал гуманитарных и естественных наук*. 1, 2 (авг. 2023), 19–32.
13. Ревитшвили Г. А., Жбанов И. В., Шабалкин Б. В. ИШЕМИЧЕСКАЯ МИТРАЛЬНАЯ НЕДОСТАТОЧНОСТЬ: СОВРЕМЕННЫЕ ВОЗМОЖНОСТИ ДИАГНОСТИКИ И ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ // Вестник Национального медико-хирургического Центра им. Н. И. Пирогова. 2021. №1. URL: <https://cyberleninka.ru/article/n/ishemicheskaya-mitralnaya-nedostatochnost-sovremennye-vozmozhnosti-dagnostiki-i-hirurgicheskogo-lecheniya> (дата обращения: 02.02.2025).
14. Antipov G.N., Kotov S.N., Shneider Yu.A. Modern methods of surgical treatment of ischemic mitral insufficiency. *Russian Journal of Thoracic and Cardiovascular Surgery*. 2019; 61 (2): 85–91 (in Russ.). DOI: 10.24022/ 0236-2791-2019-61-2-85-91.