# Posterior pericardiotomy for prevention of atrial fibrillation and pericardial effusion after aortic valve replacement

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>		
25/12/2013	No longer recruiting	☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
08/01/2014	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
12/07/2017	Surgery			

#### Plain English summary of protocol

Background and study aims

In patients who underwent a heart surgery called coronary artery bypass graft (CABG), posterior pericardiotomy (a surgical procedure carried out on the pericardium of the heart) has been shown to be protective against postoperative atrial fibrillation (abnormal heart rate after heart surgery). This study aims to find out whether it could help patients who underwent valve surgery.

Who can participate?

Patients admitted for aortic valve replacement surgery can participate in this study.

What does the study involve?

Patients are divided randomly into two groups. One group receives posterior pericardiotomy during the valve replacement surgery and the other group, called the control group, receives the standard surgical technique.

What are the possible benefits and risks of participating?

This technique may reduce the occurrence of postoperative atrial fibrillation and accumulation of fluid around the heart in patients who underwent aortic valve replacement surgery.

Where is the study run from?

This study is run from Ochapowski Regional Hospital, Russia.

When is the study starting and how long is it expected to run for? The study started in October 2013 and is expected to run for 1.5 years.

Who is funding the study?

The study is funded by the Kuban State Medical University, Russia.

Who is the main contact? Dr Vasily Kaleda vasily.kaleda@gmail.com

# Contact information

#### Type(s)

Scientific

#### Contact name

Dr Vasily Kaleda

#### Contact details

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# Additional identifiers

**EudraCT/CTIS** number

IRAS number

ClinicalTrials.gov number

## Secondary identifying numbers

N/A

# Study information

#### Scientific Title

The efficacy of posterior pericardiotomy in prevention of atrial fibrillation and pericardial effusion after aortic valve replacement

## **Study objectives**

The hypothesis is that posterior pericardiotomy can reduce the incidence of atrial fibrillation and pericardial effusion after aortic valve replacement.

## Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Kuban State Medical University Ethics Comimttee, 01/10/2013, Protocol #22

## Study design

Single-centre non-blinded randomised controlled trial

# Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Hospital

#### Study type(s)

Prevention

#### Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

#### Health condition(s) or problem(s) studied

Cardiac surgery postoperative atrial fibrillation and pericardial effusion

#### **Interventions**

Patients will be randomised to two groups: intervention and control

- 1. Intervention group: will undergo posterior pericardiotomy in addition to conventional aortic valve replacement
- 2. Control group: will undergo only conventional aortic valve replacement

#### Intervention Type

Procedure/Surgery

#### Phase

Not Applicable

#### Primary outcome measure

- 1. Mortality
- 2. The incidence of stroke
- 3. The incidence of cardiac tamponade

Concerned to in-hospital period.

#### Secondary outcome measures

- 1. The incidence of atrial fibrillation, measured with 48-h ECG monitoring and then with daily ECG
- 2. The incidence of pericardial effusion measured by echo twice after removing chest tubes and before discharge
- 3. The incidence of left pleural effusion measured by echo twice after removing chest tubes and before discharge
- 4. Length of stay in hospital

#### Overall study start date

17/10/2013

#### Completion date

17/04/2015

# **Eligibility**

#### Key inclusion criteria

- 1. Age 18-69 years
- 2. Informed consent obtained
- 3. Isolated primary aortic valve replacement

#### Participant type(s)

**Patient** 

#### Age group

Adult

#### Lower age limit

18 Years

#### Upper age limit

69 Years

#### Sex

Both

#### Target number of participants

150

#### Key exclusion criteria

- 1. Known history of atrial fibrillation before surgery
- 2. Amiodarone intake before surgery
- 3. Known history of thyrotoxicosis
- 4. Pericardial effusion with a maximum pericardial separation of more than 0.5 cm by transthoracic echocardiography (TTE) before surgery
- 5. Severe chronic obstructive pulmonary disease (COPD)
- 6. Left ventricular ejection fraction (LVEF) <30%
- 7. Left atrium (LA) diameter >50 mm
- 8. Pericardial adhesions
- 9. Any active inflammatory disease at the time of surgery (including active infection endocarditis)

#### Date of first enrolment

17/10/2013

#### Date of final enrolment

17/04/2015

# Locations

#### Countries of recruitment

Russian Federation

#### Study participating centre

#### 140, Rossiyskaya str.

Krasnodar Russian Federation 350086

# Sponsor information

#### Organisation

Kuban State Medical University (Russia)

#### Sponsor details

4, Sedina str. Krasnodar Russian Federation 350063 +7 918 377 8155 corpus@ksma.ru

#### Sponsor type

University/education

#### Website

http://www.ksma.ru

#### **ROR**

https://ror.org/04wa91k02

# Funder(s)

# Funder type

University/education

#### Funder Name

Kuban State Medical University (Russia)

# **Results and Publications**

## Publication and dissemination plan

Publication in a high-impact peer reviewed journal.

# Intention to publish date

01/07/2017

# Individual participant data (IPD) sharing plan

The current data sharing plans for the current study are unknown and will be made available at a later date.

# IPD sharing plan summary

Data sharing statement to be made available at a later date

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	14/02/2017		Yes	No