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

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

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 140, Rossiyskaya str. Krasnodar Russian Federation 350086 vasily.kaleda@gmail.com

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

Age 18-69 years
 Informed consent obtained
 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?
<u>Results article</u>	results	14/02/2017		Yes	Νο