

Study on connective tissue growth factor expressed in patients with ST-segment elevation myocardial infarction

Submission date 10/08/2015	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 31/08/2015	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 20/08/2015	Condition category Circulatory System	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Connective tissue growth factor (CTGF) is a protein which helps to make connective tissue, which connects, supports, binds, or separates other tissues or organs in the body. It has been found that CTGF can contribute to the thickening and stiffening of the heart valves. This can lead to conditions such as unstable angina (UA), a type of chest pain caused by poor blood flow to the heart which can lead to a heart attack, and ST-segment elevation myocardial infarction (STEMI), which is a type of heart attack. When a person has a heart attack, an enzyme called creatine kinase MB (CK-MB) is released into the blood by the injured heart muscle.

The aim of this study is to find out whether there is a link between the amount of CTGF in the body and the size of a heart attack. The study also aims to find out if the levels of CTGF relate to the levels of the CK-MB in STEMI patients.

Who can participate?

Adults suffering from sudden STEMI or UA.

What does the study involve?

Participants with UA have a blood test when they are admitted to hospital to test the level of CTGF in their blood. For participants who are suffering from STEMI, a sample of blood is taken 24 hours, 2 days, 7 days and 14 days after the heart attack itself. Blood is also taken every two hours in order to test for CK-MB, and to work out the when the levels in the blood are at their highest.

What are the possible benefits and risks of participating?

There are no notable benefits or risks for the participants.

Where is the study run from?

The Second Affiliated Hospital of Xuzhou Medical College (China)

When is the study starting and how long is it expected to run for?

July 2013 to March 2015

Who is funding the study?
The Second Affiliated Hospital of Xuzhou Medical College (China)

Who is the main contact?
Dr Yong Li
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Contact information

Type(s)
Scientific

Contact name
Dr Yong Li

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221006

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
N/A

Study information

Scientific Title
Connective Tissue Growth Factor was significantly expressed in ST-segment elevation Myocardial Infarction patients

Acronym
CTGFMI

Study objectives

To determine whether connective tissue growth factor assessment is a good index of the infarction size.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The Second Affiliated Hospital of Xuzhou Medical College Ethics Committee, 25/06/2013, ref: SMC1306-25.

Study design

Observational cohort study

Primary study design

Observational

Secondary study design

Cohort study

Study setting(s)

Hospital

Study type(s)

Diagnostic

Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied

1. ST-segment elevation myocardial infarction
2. Angina

Interventions

All the patients received conventional intensive medical treatment and elective PCI after hospitalization. The door-to-balloon time was 278.3 ± 43.2 hours for these 94 patients from chest pain to infarction-related artery. Patients with myocardial infarction were extracted 5ml of venous blood to detect CTGF 24h, 2 days, 7 days, 14 days after disease onset respectively. Patients with UA were extracted 5ml of venous blood to detect CTGF at the time of hospitalization. Patients with STEMI were extracted 5ml of venous blood every two hours to detect CKMB and to obtain CKMB enzyme peak value.

Intervention Type

Device

Primary outcome measure

The serum level of connective tissue growth factor (CTGF) and Creatine kinase-MB (CKMB) maximal value.

Secondary outcome measures

1. Ventricular ejection fraction.
2. Mortality Rate.

Overall study start date

03/07/2013

Completion date

15/04/2015

Eligibility

Key inclusion criteria

Suffering from one of the following:

1. Acute ST elevation myocardial infarction without direct PCI
2. Thrombolytic indications
3. Unstable angina

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

194

Key exclusion criteria

1. Previous severe valvular disease
2. Cardiomyopathy
3. Severe chronic heart failure
4. Persistent atrial fibrillation.

Date of first enrolment

03/07/2013

Date of final enrolment

10/03/2015

Locations

Countries of recruitment

China

Study participating centre

The second affiliated hospital of Xuzhou Medical College
32 Meijian Road
Quanshan District
Xuzhou
China
221006

Sponsor information

Organisation

The second affiliated hospital of Xuzhou Medical College

Sponsor details

Chest Pain Center
32 Meijian Road
Quanshan District
Xuzhou
China
221006

Sponsor type

Hospital/treatment centre

ROR

<https://ror.org/04yrcjm56>

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

The Second Affiliated Hospital of Xuzhou Medical College

Results and Publications

Publication and dissemination plan

Planning to publish results of trial soon in a peer reviewed journal.

Intention to publish date

15/09/2015

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available