

# Effect of postconditioning on cardiac protection in children undergoing tetralogy repair

|                                        |                                                   |                                                                                                   |
|----------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Submission date</b><br>07/09/2006   | <b>Recruitment status</b><br>No longer recruiting | <input type="checkbox"/> Prospectively registered<br><input type="checkbox"/> Protocol            |
| <b>Registration date</b><br>15/11/2006 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>06/01/2021       | <b>Condition category</b><br>Circulatory System   | <input type="checkbox"/> Individual participant data                                              |

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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China  
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## Additional identifiers

## Study information

**Scientific Title**  
Effect of postconditioning on cardiac protection in children undergoing tetralogy repair

**Acronym**  
Postconditioning

**Study objectives**  
Postconditioning can reduce the reperfusion injury of myocardium in open heart surgery.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approval gained on 06/05/2006 by Xiang Ya Hospital ethics committee.

**Primary study design**

Interventional

**Study design**

Randomised, controlled study

**Study type(s)**

Treatment

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

Infants and children with Tetralogy undergoing radical repair

**Interventions**

In the experimental group, the aorta is crossclamped for two cycles of 30 seconds clamping and 30 seconds unclamping onset of reperfusion after cardioplegic arrest.

In control group, the patients receive cold blood cardioplegic arrest alone without postconditioning.

**Intervention Type**

Other

**Phase**

Not Specified

**Primary outcome(s)**

1. Postoperative Creatine Kinase - Myocardial Band (CKMB)
2. Cardiac Troponin I (cTnI)
3. Inotropic use

**Key secondary outcome(s)**

1. Mortality
2. Morbidity
3. Intensive Care Unit (ICU) stay

**Completion date**

20/04/2007

**Eligibility****Key inclusion criteria**

1. Patients with Tetralogy undergoing radical surgery
2. Less than 14 years old

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Child

**Upper age limit**

14 Years

**Sex**

All

**Total final enrolment**

105

**Key exclusion criteria**

1. Tetralogy with pulmonary atresia
2. Emergency surgery
3. Palliative surgery

**Date of first enrolment**

20/09/2006

**Date of final enrolment**

20/04/2007

**Locations****Countries of recruitment**

China

**Study participating centre**

87 Xiangya Road

Changsha

China

410008

**Sponsor information****Organisation**

Xiang Ya Hospital (China)

ROR

<https://ror.org/05c1yfj14>

## Funder(s)

### Funder type

Hospital/treatment centre

### Funder Name

Trial is internally funded by the Xiang Ya Hospital (China)

## Results and Publications

### Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not provided at time of registration

### Study outputs

| Output type                     | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---------------------------------|---------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a> | results | 01/04/2009   | 06/01/2021 | Yes            | No              |