

Sternum refixatie met behulp van ZipFix.

No registrations found.

| | |
|------------------------------|------------------|
| Ethical review | Positive opinion |
| Status | Recruiting |
| Health condition type | - |
| Study type | Interventional |

Summary

ID

NL-OMON22106

Source

Nationaal Trial Register

Health condition

sternal closure , prevention of sternal complications after cardiac surgery, infection prevention and cardiac surgery

Sponsors and support

Primary sponsor: Catharina Ziekenhuis Eindhoven, the Netherlands
department of cardiothoracic surgery
Th.W.O.Elenbaas

Source(s) of monetary or material Support: no funding so far

Intervention

Outcome measures

Primary outcome

1. Dead within 30 days of operation;
2. Sternal wound infections (superficial, deep, organ-linked);
3. Sternal dehiscence.

Secondary outcome

Complaints of sternal pain and sternal dehiscence after 1 year.

Study description

Background summary

Mediaan sternotomy is the approach in cardiac surgery and closure is done traditionally with steel wires, either in a single fashion or figure of eight configuration. One of the important outcome results is sternal dehiscence and or sternal infection. This is a complication with a high mortality and morbidity and around 20.000 euro extra costs apart from the discomfort for the patients and worse outcome results.

The ZipFix sternal closure system is a new method for median sternotomy closure with tie-wrap like bands made of PEEK (poly ether ether ketone). The null hypothesis is that there is no difference in complications as sternal dehiscence and or sternal infections. Patients will be prospectively randomised and followed for these complications for 1 year.

Study objective

Sternal closure is done routinely with stainless steel wires. In some cases these wires are cutting through the bone and a non stable sternotomy can cause pain and lead to serious infections of the sternum and mediastinum. We hypothesize that a new method for sternal closure is safer and better than the old standard method.

Study design

1. At discharge;
2. 6 weeks after OR;
3. 1 year after OR through telephone.

Intervention

Patients are randomized with the program Edgar II. Randomization is between:

1. Closure of the sternum with stainless steel wires;
2. Closure of the sternum with ZIPFIX bands, made of polyether ether ketone (PEEK).

Contacts

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Eligibility criteria

Inclusion criteria

1. Patients undergoing median sternotomy;
2. Age above 18 year.

Exclusion criteria

1. No informed consent;
2. Hypersensitivity to nickel;
3. Allergic to PEEK.

Study design

Design

Study type: Interventional
Intervention model: Parallel

| | |
|-------------|-------------------------------|
| Allocation: | Randomized controlled trial |
| Masking: | Single blinded (masking used) |
| Control: | Active |

Recruitment

| | |
|---------------------------|-------------|
| NL | |
| Recruitment status: | Recruiting |
| Start date (anticipated): | 01-03-2012 |
| Enrollment: | 600 |
| Type: | Anticipated |

Ethics review

| | |
|-------------------|------------------|
| Positive opinion | |
| Date: | 01-03-2012 |
| Application type: | First submission |

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

| Register | ID |
|----------|-------------------------------------|
| NTR-new | NL3204 |
| NTR-old | NTR3355 |
| Other | : SSZIPFIX |
| ISRCTN | ISRCTN wordt niet meer aangevraagd. |

Study results

Summary results

N/A