Transfusion induced complications = transfusion associated complications ? study.

No registrations found.

Ethical review Positive opinion

Status Recruitment stopped

Health condition type -

Study type Interventional

Summary

ID

NL-OMON21130

Source

NTR

Brief title

TACTICS

Health condition

The study population exists of major, non-cardiac surgery patients, who are expected to need > 3 units of red blood cell transfusions.

Sponsors and support

Primary sponsor: LUMC financed by the Ziekenfondsraad/ZonMW **Source(s) of monetary or material Support:** 1.0G 99/023 of the

Ziekenfondsraad/ZonMW;

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2. Sanquin Blood supply.

Intervention

Outcome measures

Primary outcome

1 - Transfusion induced complications = transfusion associated complications ? study ... 3-05-2025

Postoperative:

- 1. In-hospital mortality;
- 2. Duration of intensive care stay.

Secondary outcome

- 1. Postoperative multi organ failure;
- 2. Postoperative infections;
- 3. Length of hospital stay;
- 4. Costs/benefits of universal leukocyte depletion for the Dutch health care;
- 5. Role of perioperative medication;

Follow up

- 1. Long term survival;
- 2. Cancer recurrence in GI patients;
- 3. Predictive role of cytokines and related genes.

Study description

Background summary

The aim of the study is to compare postoperative complications in patients undergoing major surgery who received non-filtered or filtered red blood cell transfusions.

No significant differences were found in mortality (odds ratio for filtered v non-filtered 0.80, 95% confidence interval 0.53 to 1.21) and in mean stay in intensive care (- 0.4 day, - 1.6 to 0.6 day). In the filtered group the mean length of hospital stay was 2.4 days shorter (- 4.8 to 0.0 day; P = 0.050) and the incidence of multi-organ failure was 30% lower (odds ratio 0.70, 0.49 to 1.00; P = 0.050).

There were no differences in rates of infection (0.98, 0.73 to 1.32).

Conclusion:

The use of filtered transfusions in some types of major surgery may reduce the length of hospital stay and the incidence of postoperative multi-organ failure.

Study objective

Does removal of allogeneic white blood cells by filtration reduce postoperative complications?

Study design

N/A

Intervention

Transfusions of filtered red blood cell concentrates vs. transfusion of stored buffy coat depleted red blood cell concentrates.

Contacts

Public

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Scientific

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Eligibility criteria

Inclusion criteria

Acute aneurysm-, elective aneurysm-, orthopaedic- and large gastro-intestinal surgery patients.

Exclusion criteria

- 1. Under 18 years of age;
- 2. Transfusions received within 3 months prior to inclusion;
- 3. Pre existing medical indication for filtered red blood cell transfusions.

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Active

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 23-03-2000

Enrollment: 1548

Type: Actual

Ethics review

Positive opinion

Date: 09-09-2005

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

RegisterIDNTR-newNL271NTR-oldNTR309Other: N/A

ISRCTN ISRCTN48093674

Study results

Summary results

- 1. BMJ 2004; 328:1281-4

- 2. Ned Tijdschrift voor Hematologie 2005;
- 2:140-7