

The role of intensive insulin therapy in critically ill medical and surgical patients

Submission date 03/07/2005	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 13/07/2005	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 18/05/2018	Condition category Other	☐ Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
2002.11

Study information

Scientific Title
The role of intensive insulin therapy in critically ill medical and surgical patients

Acronym

Insulin in ICU patients

Study objectives

Tight blood glucose control reduces mortality in critically ill patients.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Received from local medical ethics committee, 12/03/2003

Study design

Randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Critically ill medical and surgical patients

Interventions

This is a randomised controlled trial. Patients will be randomly assigned to receive intensive insulin therapy (maintenance of blood glucose at a level between 4.4 - 6.1 mM/l or 80 - 110 mg /dl) or conventional treatment (infusion of insulin only if the blood glucose level exceeded 11.1 mM/l or 200 mg/dl) and maintenance of glucose at a level between 10 - 11.1 mM/l or 180 - 200 mg/dl) throughout their stay in ICU.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Insulin

Primary outcome(s)

All cause mortality in the ICU

Key secondary outcome(s)

1. Hospital outcome
2. Cause of death
3. ICU and hospital LOS
4. Mechanical ventilation duration
5. The need for renal replacement therapy
6. Transfusion requirements

7. ICU acquired infections

8. Causes of death

Completion date

30/11/2005

Eligibility

Key inclusion criteria

1. Adults (greater than 18 years old) able to give consent (directly or via proxy)
2. Random admission blood glucose level greater than 6.1 mM/l (greater than 110 mg/dl)

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

1. Type I diabetes
2. Patients admitted with diabetic ketoacidosis
3. Patients with terminal illness (survival judged by the treating physician less than four weeks)
4. Patients with do not resuscitate (DNR) orders
5. Pregnancy
6. Patients with expected intensive care unit (ICU) length of stay (LOS) of less than 24 hours
7. History of hypoglycaemia during the same hospitalisation
8. Seizure disorder (known active in the last 6 months)
9. Post-cardiac arrest patients
10. Readmission to ICU within the same hospitalisation
11. Brain death
12. Liver transplant
13. Enrolled in another competing study
14. Refused consent
15. No consent within 24 hours of meeting inclusion criteria
16. Other reasons

Date of first enrolment

01/01/2004

Date of final enrolment

30/11/2005

Locations

Countries of recruitment

Saudi Arabia

Study participating centre

King Fahad National Guard Hospital

Riyadh

Saudi Arabia

11426

Sponsor information

Organisation

King Fahad National Guard Hospital (Saudi Arabia)

ROR

<https://ror.org/009djsq06>

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

King Fahad National Guard Hospital (Saudi Arabia) - ICU Research Fund

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?
Results article	results	01/12/2008		Yes	No
	nested cohort study results				

