Systemic Levels of Cystatin C in Critically Ill Patients at risk for Acute Renal Failure.

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To evaluate whether (changes in) serum CysC concentration can be used as a marker of renal function in a large cohort of critically ill patients, and to describe the kinetics of CysC in these patients.

Ethical review	Approved WMO
Status	Pending
Health condition type	Renal disorders (excl nephropathies)
Study type	Observational non invasive

Summary

ID

NL-OMON29748

Source
ToetsingOnline

Brief title
SCARF 1

Condition

- Renal disorders (excl nephropathies)

Synonym
acute renal failure, renal failure

Research involving
Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: acute renal failure, cystatin C, intensive care

Outcome measures

Primary outcome

ARF and ARF for which HF is started.

Secondary outcome

None

Study description

Background summary

Critically ill patients admitted in ICU are at high risk for developing acute renal failure and 4-6% will require some form of renal replacement therapy. Until now it is difficult to predict witch patient will develop acute renal failure. Presently, the detection of ARF is primarily based on an increase of serum creatinine concentration.
Cystatin C is a protein produced by all nucleated cells at a constant rate, independent of age, gender and musclemass. It is completely filtrated in the glomerulus and metabolized, but not secreted in the tubulus.
The serum CysC concentration has therefore been advocated as a marker of renal function in non-ICU patients.

Study objective

To evaluate whether (changes in) serum CysC concentration can be used as a marker of renal function in a large cohort of critically ill patients, and to describe the kinetics of CysC in these patients.

Study design

Prospective, observational, multi-center study.

Study burden and risks

Blood specimens are collected on the day of admission, every second day during the first week, and 3-4 times per week thereafter until end of stay in ICU; per

sample 5 cc of blood is obtained. urine samples are collected at the same time points

Contacts

Public
Academisch Medisch Centrum

Meibergdreef 9
1105 AZ Amsterdam
Nederland
Scientific
Academisch Medisch Centrum

Meibergdreef 9
1105 AZ Amsterdam
Nederland

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

Expected duration of mechanical ventilation > 48 hours and/or
Expected duration of stay in ICU > 72 hours
age > 18 years

Exclusion criteria

Chronic renal replacement therapy before present admission
Plasmapheresis
High dose corticosteroids (> 5 mg/day)

Study design

Design

Study type: Observational non invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Diagnostic

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-08-2006
Enrollment:	600
Type:	Anticipated

Ethics review

Approved WMO

Application type:	First submission
Review commission:	METC Amsterdam UMC

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
CCMO	NL13204.018.06