The association between a drop in systolic blood pressure from the individual reference value and in-hospital mortality in ED patients.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON27709

Source
NTR

Brief title
DeltaSBP

Health condition

Presentation in the ED

Sponsors and support

Primary sponsor: none
Source(s) of monetary or material Support: Maxima Medical Centre

Intervention

Outcome measures

Primary outcome

in-hospital mortality

Secondary outcome

ICU admission

Study description

Background summary

Risk stratification of ED patients is important for appropriate initial treatment and disposition to a ward or intensive care unit (ICU). Clinical deterioration of patients often starts in the prehospital setting and only when patients start to feel too sick they will visit the GP or Emergency Department (ED). In a previous study we showed that the odds for in-hospital mortality increased approximately linearly with decreasing systolic blood pressure (SBP) starting at 140mmHg for unselected ED patients. Thus, on an average cohort level, prognosis of ED patients deteriorates already with SBPs below 140 mmHg. This may be explained by a relatively small number of ED patients who had a much higher SBP than 140 mmHg before they presented to the ED, as hypertension is a very common chronic disease in Western countries. If so, not only the initial SBP in the ED is relevant for prognosis but the absolute or relative reduction of the SBP which was normal for the individual patient before the ED presentation, i.e. it is important to know the baseline SBP of the individual patient. However, this information may often not be available in the ED as electronical patient records (EPR) are not routinely shared between general practitioners and hospitals in the Netherlands, due to privacy laws. In addition, in the outpatient clinics, blood pressure is not routinely measured. Before we can investigate the association between the absolute or relative reduction of SBP from the individual baseline SBP, we need to know in how many patients baseline SBPs are available. If indeed many baseline values are unavailable while the reduction of SBP is associated for the prognosis of the individual ED patient, this may plead for the need of a shared Electronic Patient Record (EPR) with the necessary clinical information, such as baseline vital signs. More importantly, if we find an association between a reduction of SBP from the individual baseline SBP and in-hospital mortality, a larger prospective cohort study would be indicated, which would than help to improve risk stratification of individual ED patients.
The aim of the present pilot study is therefore two-fold:
Objectives
1. To assess how often individual baseline values for SBP are known in ED patients.
2. To assess whether a change in SBP from the individual baseline values for SBP are associated with in-hospital mortality.

Study objective

A low delta SBP is associated with an increased risk of mortality

Study design

We study overall in-hospital mortality or ICU admission from the ED. After discharge we don't follow-up on patients.

Intervention

no

Contacts

Public
Leiden Universitair Medisch Centrum
Bart Candel

0644665616
Scientific
Leiden Universitair Medisch Centrum
Bart Candel

0644665616

Eligibility criteria

Inclusion criteria

Patients >70 years with ED visit and admission

Exclusion criteria

triage category blue/green

Study design

Design

Study type:	Observational non invasive
Intervention model:	Factorial

Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	Active

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	03-11-2020
Enrollment:	220
Type:	Anticipated

IPD sharing statement

Plan to share IPD: No

Ethics review

Positive opinion

Date:	03-11-2020
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	NL9029
Other	METC Máxima MC : N20.052

Study results