Blood Gas Comparison trial

Gepubliceerd: 15-10-2019 Laatst bijgewerkt: 18-08-2022

Treatment of patients with respiratory complaints in the emergency department (ED) based on venous blood gas (VBG) results does not differ from treatment based on arterial blood gas (ABG) results.

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON27674

Bron
NTR

Verkorte titel
BGC trial

Aandoening

Respiratory complaints

Ondersteuning

Primaire sponsor: None
Overige ondersteuning: Zuyderland Medical Centre

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The main study endpoint is the frequency of alterations in treatment of patients with respiratory complaints in the emergency department (ED) based on venous blood gas (VBG) results compared to treatment based on arterial blood gas (ABG) results. We will assess which alterations in treatment occur, the characteristics of alterations and which ABG resuls

cause the change.

Toelichting onderzoek

Achtergrond van het onderzoek

An integral part of assessment of patients with respiratory complaints in the emergency department (ED) is determining the acid-base, ventilation and oxygenation status. Traditionally, arterial blood gas (ABG) results have been used. Previous research shows venous blood gas (VBG) results could be a reliable alternative. ABG sampling is often painful, can be challenging to perform, and carries greater risks. The primary objective of this study is to test the hypothesis that treatment of patients with resipratory complaints in the emergency department (ED) based on venous blood gas (VBG) results does not differ from treament based on arterial blood gas (ABG) results. We will assess the frequency of alterations in treatment bases on VBG results compared to treatment based on ABG results. Which alteration intreatment occur, the charesteristics of the alterations and the ABG results causing the change (pH, bicarbonate, pCO2, lactate or pO2) will be assessed.

Doel van het onderzoek

Treatment of patients with respiratory complaints in the emergency department (ED) based on venous blood gas (VBG) results does not differ from treatment based on arterial blood gas (ABG) results.

Onderzoeksopzet

Total expected study duration is 6 weeks.

Onderzoeksproduct en/of interventie

One extra blood sample will be obtained with the standard venepuncture or from the peripheral venous catheter to collect the venous blood gas. No extra vascular puncture is required.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Patients (≥ 18 years) presenting in the ED with dyspoea, respiratory rate > 20/min or peripheral oxygen saturation <95%, a reliable saturation measured by pulse oximetry and an indication, determined by the treating physician, to determine the acid-bae, ventilation and oxygenation status by arterial blood gas.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

A potential subject who meets any of the following criteria will be excluded from participation in this study:
- Not capable to give informed consent within reasonable time after stabilisation and abating of the accompanying psychological stress, and no representative availabe to give informed consent on behalf of the patient.
- Arterial blood gas results are required for other reasons than determining the acid-base, ventilation and oxygenation status, such as determing the alveolar to arterial oxygen gradiënt (A-a gradient).
- No physician or qualified nurse available for ABG sampling.
- Failed ABG or VBG sampling after two attempts.
- Previous participation in the study.

Onderzoeksopzet

Opzet

Type: Observationeel onderzoek, zonder invasieve metingen

Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blindering:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving gestopt
(Verwachte) startdatum:	21-10-2019
Aantal proefpersonen:	155
Type:	Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

Ethische beoordeling

Positief advies

Datum:	15-10-2019
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL8085

Register	ID
Ander register	METC Zuyd : METCZ20190084

Resultaten