

Automatic Weaning Using Adaptive Support Ventilation (ASV) - Effect of an Early Weaning Protocol on Time till Extubation of Post-Coronary Artery Bypass Surgery Patients.

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We hypothesize time till extubation of post-CABG patients can be shortened by using an early weaning protocol with ASV.

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON21744

Bron

Nationaal Trial Register

Verkorte titel

N/A

Aandoening

1. Mechanical ventilation;
2. weaning;
3. Coronary Artery Bypass Grafting (CABG).

Ondersteuning

Primaire sponsor: Academic Medical Center (AMC), Department of Intensive Care

Overige ondersteuning: N/A

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

1. Duration of ventilation.

Toelichting onderzoek

Achtergrond van het onderzoek

Adaptive support ventilation (ASV) is a microprocessor-controlled mode of mechanical ventilation that maintains an operator preset minimum minute ventilation, independent of activity of the patient. ASV provides automatic selection of ventilatory settings and continuous – breath by breath – adaptation. In addition, it's closed-loop control switches automatically from pressure controlled (PC) mechanical ventilation to pressure support (PS) mechanical ventilation, according to the patient status.

Previous studies have tested the efficiency, safety, and adaptability of ASV. A weaning protocol based on ASV simplifies ventilatory management; in addition, ASV shortens duration of tracheal intubation after fast-track cardiothoracic surgery. We recently studied ASV in post-coronary artery bypass surgery (CABG) patients in our setting and found a reduction of the number of ventilatory-alarms and ventilator-manipulations [ISRCTN31808827; yet unpublished data]. However, weaning with ASV was not faster as compared to standard weaning. Indeed, mean duration of intubation and mechanical ventilation (i.e., time till extubation) was 17 hours – this is very much opposite to other studies on this subject, in which mean duration of time till extubation is ~ 10 hours^{3;4}.

Aim of the study

We hypothesize time till extubation of post-CABG patients can be shortened by using an early weaning protocol with ASV.

Doel van het onderzoek

We hypothesize time till extubation of post-CABG patients can be shortened by using an early weaning protocol with ASV.

Onderzoeksopzet

N/A

Onderzoeksproduct en/of interventie

Patients will be weaned from the ventilator using a standard protocol and an early weaning protocol.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Planned and uneventful CABG;
2. Following receipt of verbal and written information about the trial, the patient must provide signed and dated informed consent before any trial related activity is carried out.

Belangrijkste redenen om niet deel te kunnen nemen

(Exclusiecriteria)

1. History of any pulmonary disease;
2. History of any previous pulmonary surgery;
3. Valve surgery;
4. Arrival at the ICU with intra-aortic balloon pump, or inotropes at a more than usual rate (maximum dosages in ml per hour: dopamine [4], norepinephrine [4], dobutamin [4] or epinephrine [any rate]).

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Actieve controle groep

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	22-11-2007
Aantal proefpersonen:	128
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies	
Datum:	20-11-2007
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	NL1101
NTR-old	NTR1136
Ander register	: incomplete
ISRCTN	ISRCTN wordt niet meer aangevraagd

Resultaten

Samenvatting resultaten

N/A