Influence of RYANodyne receptor 1 mutations On Pulmonary arterial Pressure And ventilation During isocapnic hypoxia.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON25834

Source
Nationaal Trial Register

Brief title
Ryan op pad

Health condition

Malignant hyperthermia
hypoxia
hypoxic ventilatory response
hypoxic pulmonary vasoconstriction

Sponsors and support

Primary sponsor: LUMC
Source(s) of monetary or material Support: LUMC

Intervention

Outcome measures

Primary outcome

1. Systolic PAP;

2. HVR.

Secondary outcome

1. Systolic and diastolic cardiac functions;

2. Vital and ventilatory parameters.

Study description

Background summary

The ryanodine receptor plays a crucial role in the development of the so called hypoxic pulmonary vasoconstriction. Malignant hyperthermia patients have a mutated ryanodine receptor. In this study we want to investigate the influence of the ryanodine receptor on the human response to hypoxia.

Study objective

1. What are the normoxic ventilation parameters and systolic PAP in MH patients?

2. What is the influence of hypoxia on the systolic PAP on MH patients?

Study design

1 hour.

Intervention

One hypoxic period of 1 hour.

Contacts

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Eligibility criteria

Inclusion criteria

Healthy Malignant Hyperthermia patients with a phenotypic high susceptibility and a proven causative mutation.
The major inclusion criteria are that the subject has echo evidence of tricuspid regurgitation during systole, which is not clinically relevant but in fact can be demonstrated in most normal individuals.

Exclusion criteria

1. Obesity (BMI > 30);

2. Presence of medical disease: heart-, lung-, liver-, kidney- and lung disease; diabetes;

3. Presence of psychiatric disease:

A. History of chronic alcohol or drug use;

B. Possibility of pregnancy;

C. Lactation.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Non-randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Placebo

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-05-2011
Enrollment:	24
Type:	Anticipated

Ethics review

Positive opinion

Date:	17-02-2011
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	NL2656

Register	ID
NTR-old	NTR2784
Other	METC LUMC / CCMO : P11.013 / NL35083.058.11;
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A