

# The effect of PSA on the pCO2

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruiting
<b>Health condition type</b>	-
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON26433

### Source

Nationaal Trial Register

### Brief title

ECOO

### Health condition

Atrial fibrillation

## Sponsors and support

**Primary sponsor:** Radboudumc

**Source(s) of monetary or material Support:** Radboudumc

## Intervention

## Outcome measures

### Primary outcome

the effects of prolonged deep PSA on the arterial CO2

### Secondary outcome

the effects of prolonged deep PSA on the arterial blood gas and pH

# Study description

## Background summary

Background and study aims:

Atrial fibrillation (AF) is a common sustained rhythm disorder. Pulmonary vein isolation (PVI) is the standard therapeutic treatment for symptomatic AF.

This procedure may cause discomfort to the patient.

Therefore, PVI is usually performed under procedural sedation and analgesia (PSA).

PSA is associated with respiratory depression which leads to alveolar hypoventilation and resulting in increased arterial CO<sub>2</sub> levels.

There is no data available regarding the actual effect of PSA on the arterial CO<sub>2</sub> and the blood gas.

We hypothesize that prolonged deep PSA increases the arterial CO<sub>2</sub> levels. Increased levels of CO<sub>2</sub> lead to a change in the pH of the blood, i.e. a respiratory acidosis. Although there are no obvious adverse effects of short-term acidosis, it is not a physiologically normal condition.

study population:

Patients between 18 and 80 years, which are scheduled for a pulmonary vein isolation with PSA and is willing to participate in this trial.

what does the study involve?

Patients who are included in the study will get an arterial catheter prior to the PSA.

Every 30 minutes a blood samples will be drawn from the catheter to analyse

possible benefits and risks of participating:

There is a minimal risk related to the arterial cannulation. But the incidence is low and arterial cannulation is a relatively safe procedure.

There is no benefit for the patients who participate in the study. The goal is to better understand the side effects of PSA

## Study objective

We hypothesize that prolonged deep PSA increases the arterial CO<sub>2</sub> levels

## Study design

start just before the pulmonale vein isolation and end 60 minutes after the procedure.

## Intervention

none

## Contacts

### Public

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### Scientific

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## Eligibility criteria

### Inclusion criteria

1. Pulmonary vein isolation performed under PSA
2. Age 18-80 years
3. ASA classification 1 or 2
4. Informed consent

### Exclusion criteria

1. Pregnancy
2. BMI >30
3. BMI <18
4. Obstructive sleep apnea syndrome
5. COPD / Astma
6. Known bleeding disorders

## Study design

### Design

Study type:	Observational non invasive
Intervention model:	Other

Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

## Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	01-11-2019
Enrollment:	20
Type:	Anticipated

## IPD sharing statement

**Plan to share IPD:** Undecided

## Ethics review

Positive opinion	
Date:	19-06-2019
Application type:	First submission

## Study registrations

### Followed up by the following (possibly more current) registration

ID: 46065  
Bron: ToetsingOnline  
Titel:

### Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
NTR-new	NL7812
CCMO	NL67983.091.18

**Register**

OMON

**ID**

NL-OMON46065

## Study results