No registrations found.

**Ethical review** Positive opinion **Status** Recruiting

Health condition type -

**Study type** Interventional

# **Summary**

#### **Source**

**NTR** 

#### **Brief title**

**RRSS-trial** 

### **Health condition**

Hypertension, Renal sympathetic denervation, Sprionolactone. Hypertensie, Renale sympathische denervatie, spironolacton

### **Sponsors and support**

Primary sponsor: Erasmus MC: Department of Radiology

Source(s) of monetary or

material Support:

Not applicable

#### Intervention

#### **Outcome measures**

### **Primary outcome**

Difference in 24-hour ambulatory blood pressure between spironolactone and endovascular renal denervation 6 months after intervention.

### **Secondary outcome**

- 1. Proportion of patients with normalisation of ambulatory blood pressure in the two intervention groups;
- 2. Proportion of patients per intervention group with a decrease in 24-hour ambulatory blood pressure of at least 10 mmHg systolic and at least 5 mmHg diastolic;
- 3. Predictive value of clonidin-suppression test on blood pressure response to endovascular sympathetic denervation;
- 4. Cost effectiveness of renal sympathetic denervation;
- 5. Difference in quality of life score between endovascular renal denervation and spironolactone group.

# **Study description**

### **Study objective**

Renal sympathetic denervation is not superior to add-on therapy with spironolactone in treatment-resistant hypertension.

### Study design

Ambulatory blood pressure will be measured 6 months after intervention.

#### Intervention

- 1. Endovascular renal sympathetic denervation;
- 2. Addition of spironolactone to existing antihypertensive treatment.

The intervention consists either of endovascular renal sympathetic denervation or the addition of spironolactone to existing antihypertensive treatment.

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Endovascular renal sympathetic denervation is a recently introduced technique. With the technique a catheter is introduced via a groin artery in the left and right renal artery.

Using radiofrequency energy the nerves surrounding the renal arteries are ablated. This a once a time procedure lasting about 1 hour. With this technique blood pressure potentially falls and this effect is compared with the addition of spironolactone in a maximal once daily dose of 50 mg.

Patients with treatment-resistant hypertension are included. They will be randomised for endovascular renal sympathetic denervation or treatment with spironolactone.

Spironolactone is used for 6 months. The primary endpoint of this study is the difference in 24-hour ambulatory blood pressure response between the group of patients treated with endovascular denervation and the group of patients treated with spironolactone after 6 months of follow-up.

### **Contacts**

#### **Public**

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#### Scientific

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# **Eligibility criteria**

#### Inclusion criteria

- 1. Age > 18 yrs and < 75 yrs;
- 2. Treatment-resistent hypertension;
- 3. Willingness to give informed written consent.

#### **Exclusion criteria**

- 1. Secondary hypertension;
- 2. Renal arteries inaccessible for endovascular denervation;
- 3. Suboptimal dosing of BP lowering medication;
- 4. Incompliant to treatment;
- 5. White coat hypertension;
- 6. Pregnancy;
- 7. GFR < 45 ml/min;
- 8. Use of vit K antagonist that can not be discontinued for a short period;
- 9. Sprinolactone intolerance;
- 10. Intolerance for one of the components of Exforge-Hydrochlorothiazidee;
- 11. Myocardial infarction or cerebrovascular accident 3 months prior to randomization;
- 12. Life expectancy < 2 year.

# Study design

### **Design**

Study type: Interventional

Intervention model: Parallel

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Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

#### Recruitment

NL

Recruitment status : Recruiting
Start date (anticipated) : 01-06-2012

Enrollment: 120

Type: Anticipated

# **Ethics review**

Positive opinion

Date: 21-05-2012

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 NL3297 NTR-old NTR3444

Other METC Erasmus MC : MEC-2011-481 ISRCTN Wordt niet meer aangevraagd.

# **Study results**

# **Summary results**

M. Ezzahti, A. Moelker, A.H. van den Meiracker: Endovascular renal sympathetic denervation. A new treatment for treatment resistant hypertension? Hart Bulletin 2012;43:34-39.