

# Clinical and histologic effect of transrectal intraprostatic injections with botulinum toxin A in patients with lower urinary tract symptoms caused by benign prostatic hyperplasia.

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON20354

### Source

Nationaal Trial Register

### Brief title

BOP1

### Health condition

Benign prostatic hyperplasia

## Sponsors and support

**Primary sponsor:** University Medical Center Utrecht, Utrecht  
The Netherlands

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

## Intervention

## Outcome measures

### Primary outcome

Symptom relief according to the International Prostatic Symptom Score(IPSS)

### Secondary outcome

1. Urodynamic obstruction (according to Schafer)
2. Post void residual
3. Decrease in prostate volume
4. Histologic change after 1 month
5. PSA change
6. Other treatment needed

## Study description

### Background summary

Rationale:

The standard treatment of lower urinary tract symptoms due to benign prostatic hyperplasia, not responding to medication, is transurethral prostatic resection. This is an invasive procedure requiring general or regional anesthesia. Intraprostatic injection of Botox causes relaxation of smooth muscle tissue and causes cellular apoptosis. Therefore it is possibly effective for treatment of benign prostatic hyperplasia. Transrectal prostatic injection is minimally invasive and can be performed without anesthesia in the outpatient clinic.

Objective:

To determine the subjective effect on lower urinary tract symptoms and to determine objective urodynamic and histologic changes after intraprostatic botulinum toxin injection.

Study design:

Prospective.

Study population:

Male patients with lower urinary tract symptoms due to benign prostatic hyperplasia, not responding to medication.

Intervention:

Transrectal injection of botulinum toxin into the prostate.

Main study parameters/endpoints:  
Symptom relief (IPSS).

Urodynamic obstruction (according to Schafer)

Post void residual

Decrease of prostate volume

Histologic changes after 1 month.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness:

At least 8 visits to the outpatient clinic are necessary. Four urodynamic studies will be performed (in total 4 hours). Patients will be asked to fill out questionnaires and voiding diaries with every visit.

There is a risk for prostatitis and a risk for hemorrhage due to the prostatic biopsy and after the intraprostatic injection. Furthermore there is a risk for side effects of the botulinum toxin like allergy (infrequently), aritmia and respiratory problems in case of overdose.

### **Study objective**

Botulinum toxin type A injection of the prostate causes relaxation and cellular apoptosis and by this way will relieve lower urinary tract symptoms in patients with benign prostatic hyperplasia.

### **Intervention**

Transrectal intraprostatic injection with botulinum toxin type A

## **Contacts**

### **Public**

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## Eligibility criteria

### Inclusion criteria

1. Age > 55
2. Signed informed consent
3. LUTS with IPSS (international prostatic symptom score) > 7
4. Insufficient response to oral medication
5. Prostatic volume 30-50 ml
6. Urodynamic infravesical obstruction > grade II according to Schafer
7. Willing and able to fill out questionnaires and voiding diaries
8. Willing and able to attend proposed investigations

### Exclusion criteria

1. Neuropathic bladder dysfunction
2. Prostatic carcinoma
3. Coagulation disorder
4. Urinary tract infection
5. Bladder calculus
6. Postrenal renal insufficiency
7. Myopathic disorder

## 8. Anatomical defects preventing transrectal approach

### Study design

#### Design

Study type:	Interventional
Intervention model:	Other
Masking:	Open (masking not used)
Control:	N/A , unknown

#### Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-01-2007
Enrollment:	20
Type:	Anticipated

### Ethics review

Not applicable	
Application type:	Not applicable

### 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

NTR-new

NTR-old

Other

ISRCTN

### ID

NL739

NTR749

: N/A

ISRCTN42633050

## Study results

### Summary results

N/A