

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Comparison study of Bipolar versus Monopolar transurethral resection of prostate in patients with benign prostatic hyperplasia

Protocol summary

Summary

Objectives: comparison the results of monopolar TURP with bipolar TURP at 6 months follow-up. Design: This study is a single blinded (patient is blinded) randomized controlled trial which is conducted amongst 94 patients candidate for TURP surgery who are referred to Golestan Hospital which is governed by Ahvaz Jundishapur University of Medical Sciences. Inclusion criteria: patients with BPH without any previous procedure on the urethra or Prostate; patients with BPH without any history of urethral stricture. Exclusion criteria: the existence of bladder stone; large bladder diverticula; diagnosis of Prostate cancer in final pathology. the patients are randomly assigned to two groups; group B that undergo bipolar TURP and group M that undergo monopolar TURP. Before the study, the severity of Lower Urinary Tract Symptoms (LUTS) and erectile function are evaluated by using of IPSS questionnaire and IIEF-5 questionnaire. Catheterisation time and hospital stay are recorded postoperatively, and 3 and 6 months after surgery the LUTS and erectile function will be evaluated by using of IPSS and IEF-5 questionnaires. In addition, the incidence of urethral stricture and reoperation rate will be evaluated along 6 months follow-up.

General information

Acronym

Trans Urethral Resection of Prostate(TURP)

IRCT registration information

IRCT registration number: **IRCT2017060234301N1**

Registration date: **2017-08-11, 1396/05/20**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2017-08-11, 1396/05/20

Registrant information

Name

Jahanbakhsh Rahimi zadeh

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 61 3335 6789

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Ahvaz Jundishapur University of Medical Sciences

Expected recruitment start date

2016-08-22, 1395/06/01

Expected recruitment end date

2017-02-19, 1395/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison study of Bipolar versus Monopolar transurethral resection of prostate in patients with benign prostatic hyperplasia

Public title

Bipolar versus Monopolar technique in Transurethral resection of Prostate(TURP)

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: patients with BPH without any previous procedure on the urethra or Prostate; patients with BPH

without any history of urethral stricture. Exclusion criteria: the existence of Bladder stone; large bladder diverticula; diagnosis of Prostate cancer in final pathology.

Age

No age limit

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 94

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

after enrollment of patients in the study by using inclusion and exclusion criteria, simple randomization was performed with Winpepi application

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Ahvaz Jundishapur University of Medical Sciences

Street address

Ethics committee of Ahvaz Jundishapur University of Medical Sciences, Farvardin st., Golestan blv., Ahvaz

City

Ahvaz

Postal code

00986193673166

Approval date

2017-05-22, 1396/03/01

Ethics committee reference number

IR.Ajums.REC.1396.181

Health conditions studied

1

Description of health condition studied

Benign Prostatic Hyperplasia

ICD-10 code

N41

ICD-10 code description

HYPERPLASIA OF PROSTATE

Primary outcomes

1

Description

lower urinary tract symptoms

Timepoint

Before and, 3 and 6 month after surgery

Method of measurement

IPSS Questioneir

2

Description

Erectile function

Timepoint

Before surgery, 3 month and 6 month after surgery

Method of measurement

IIEF-5 Questioneir

3

Description

Urethral Stricture

Timepoint

Along 6 month after surgery

Method of measurement

Retrograde Urethragraphy(RUG)

4

Description

Reoperation

Timepoint

Along 6 month after surgery

Method of measurement

Cases

Secondary outcomes

1

Description

Hemoglobin(Hb)

Timepoint

Before and after surgery

Method of measurement

Laboratory

2

Description

Catheterisation Time

Timepoint

After surgery

Method of measurement

Dayes

3

Description

Hospital stay

Timepoint

After surgery

Method of measurement

Dayes

4

Description

Blood Na

Timepoint

befor and aftersurgery

Method of measurement

Laboratory

Intervention groups

1

Description

Transurethral resection of Prostate with bipolar technology: In this surgery, by using of a resectoscope the prostate is resected, transurethrally. In this surgical technique bipolar electrical source and bipolar loop are used and irrigation solution is Isotonic.

Category

Treatment - Surgery

2

Description

Transurethral resection of Prostate with Monopolar technology: in this surgical technique by using of a resectoscope the prostate is resected, transurethrally. In this method, Monopolar loop and Monopolar electrical source are used and irrigation solution is hypotonic.

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center**Name of recruitment center**

Ahvaz Golestan Hospital

Full name of responsible person

Dr.Esmaeel Mosapour

Street address

Farvardin street, Golestan blv., Ahvaz

City

Ahvaz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Ahvaz Jundishapur

Universtlity of Medical Sciences

Full name of responsible person

Dr.behzad sharif makhmalzadeh

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Vice chancellor for research, Jundishapur University of Medical sciences, Farvardin street, Golestan blv., Ahvaz

City

Ahvaz

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Vice chancellor for research, Ahvaz Jundishapur Universtlity of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

empty

Person responsible for general inquiries

Contact**Name of organization / entity**

Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Jahanbakhsh Rahimizadeh

Position

Urology Resident

Other areas of specialty/work**Street address**

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty