REZŪM® (STEAM ABLATION) TREATMENT FOR BENIGN PROSTATE ENLARGEMENT

Information about your procedure from
The British Association of Urological Surgeons (BAUS)

This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.

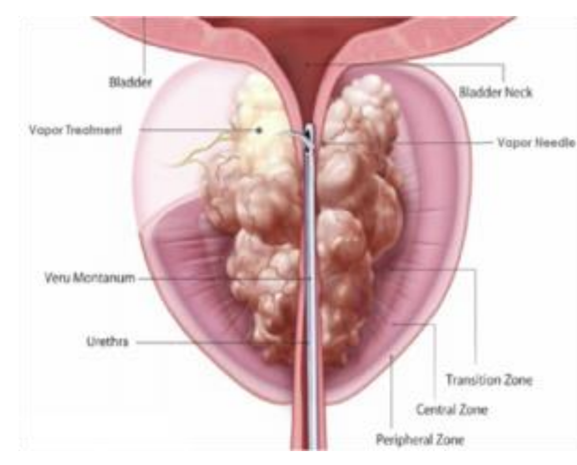
To view the online version of this leaflet, type the text below into your web browser:
http://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Rezum.pdf

Key Points

- The Rezūm procedure involves passing a telescope through your urethra (waterpipe) and injecting steam into the obstructing prostate tissue around your urethra (waterpipe)
- The prostate tissue then shrinks over the following 3-6 months
- It is designed to improve your urinary symptoms without the need for burning or removing any prostate tissue
- The procedure is usually performed as a day-case
- You will need to have a bladder catheter for a few days after the procedure
- Sexual side-effects such as erectile dysfunction (impotence) are very rare whilst retrograde (dry) ejaculation is also very uncommon
- In a small number of men further treatment may be needed at a later stage

What does this procedure involve?

Your prostate gland sits around your urethra (waterpipe) as it leaves the bladder and, when it enlarges, it may block the flow of urine.



The Rezūm procedure involves steam injections into your prostate. The number of injections needed depends

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on the size of your prostate. The steam injections can be put into the prostate tissue surrounding the urethra (lateral lobes) and into any prostate tissue that extends into the bladder (median lobe).

Following the procedure, we usually put a temporary catheter in your bladder to avoid the risk of retention. This catheter is removed after a few days.

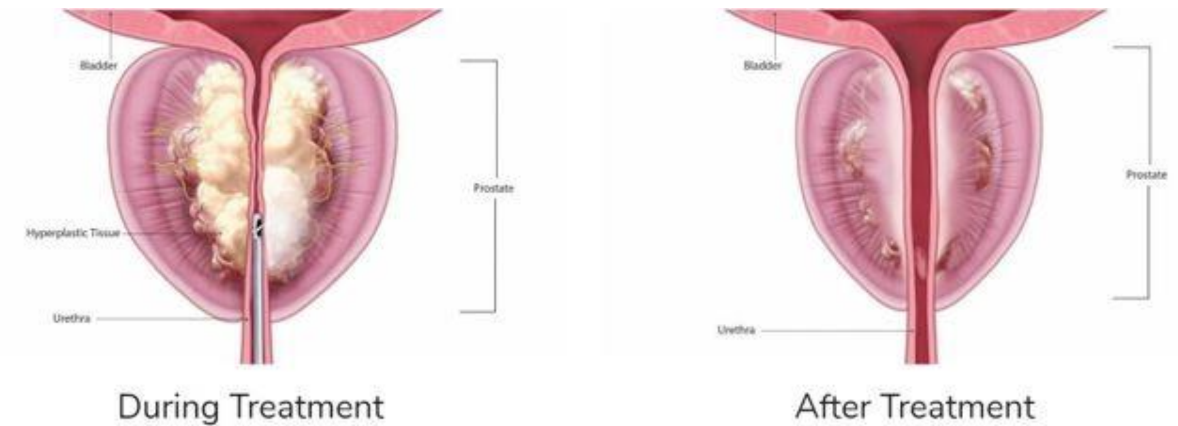
Over the subsequent weeks, the prostate resorbs (shrinks) due to the steam injection, which opens up the water pipe to allow improved urinary flow and bladder emptying.

The main benefits of this procedure, compared with other surgical treatments for prostate enlargement, are:

- a short stay in hospital (usually a day-case);
- an earlier return to normal activities;
- a minimally-invasive (minor) procedure; and
- sexual side-effects such as retrograde (dry) ejaculation or erectile dysfunction (impotence) are rare.

Your urologist will be able tell you whether the size and shape of your prostate means that this procedure is suitable for you, but it cannot be used in all men with prostate enlargement.

The images below demonstrate how the obstructing prostate tissue resorbs after the procedure.



During Treatment After Treatment

What are the alternatives?

- **Conservative treatment** – restricting your fluid or caffeine intake to improve your urinary symptoms and help you avoid surgery

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- **Drug treatment** – using a drug to shrink your prostate (e.g. finasteride, dutasteride) or one which relaxes the muscles in your prostate to improve your urine flow (e.g. tamsulosin, alfuzosin)
- **Urolift™** – a minimally-invasive procedure to insert implants into your urethra (waterpipe) to pull back the obstructing prostate tissue
- **Transurethral resection of the prostate (TURP)** - removal of the central, obstructing part of your prostate using electric current through a telescope passed along your urethra (waterpipe)
- **Holmium laser enucleation of the prostate (HoLEP)** - removal of the central, obstructing part of your prostate using a laser through a telescope passed along your urethra
- **Green light laser prostatectomy (GLLP) or Holmium laser (HoLAP)** - using a different type of laser to vaporise (burn away) the obstructing prostate tissue through a telescope passed along your urethra
- **Prostate artery embolisation** – a technique where an expert radiologist (X-ray doctor) blocks off the arteries to your prostate gland, causing it to shrink over time

What happens on the day of the procedure?

Your urologist (or a member of their team) will briefly review your history and medications, and will discuss the surgery again with you to confirm your consent.

Your procedure may be performed using a range of anaesthetic options. You may undergo the procedure under general anaesthetic, spinal anaesthetic, sedation or local anaesthesia. Your surgeon (and/or anaesthetist) will discuss this with you.

If you have a general anaesthetic, we may provide you with a pair of TED stockings to wear on the day of your procedure. These help to prevent blood clots from developing and passing into your lungs.

Most patients are discharged home the same day.

Details of the procedure

- we carry out the procedure either under a general, regional or local anaesthetic, according to individual circumstances
- we usually give you antibiotics before the procedure, after you have been checked for any allergies
- we put a telescope into your bladder through your urethra

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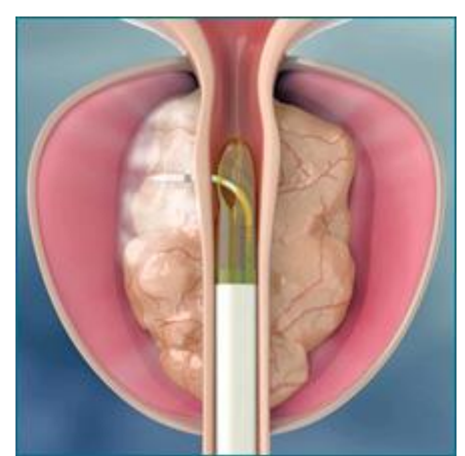
- we inject steam into the prostate under direct vision, through the telescope, using a special applicator (pictured right).
- the procedure takes 10-15 minutes to perform
- you will usually have a bladder catheter for a few days after the procedure
- we will give you a course of antibiotics for a few days after the procedure to reduce the risk of infection



We normally bring you back to hospital to remove your bladder catheter. You may find it painful to pass urine at first and it often comes more frequently than normal.

Your urine is likely to become bloody after the procedure, and this can last for four to six weeks. You are also likely to see blood in your semen (ejaculate) which can last up to three months.

Are there any after-effects?

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon's advice about the risks and their impact on you as an individual:

After-effect	Risk
Temporary burning & stinging when you pass urine (which may last for 5-7 days)	1 in 3 patients (33%)
Temporary bleeding in your urine (which may last for 5-7 days)	1 in 4 patients (25%)
Temporary pain or discomfort in your pelvic area	Between 1 in 5 & 1 in 6 patients (16-20%)

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Infection in your urine requiring treatment with antibiotics	1 in 15 patients (6-7%)
The procedure may not relieve all your symptoms, so that you need further treatment within 4 years	1 in 25 patients (approx 4%)
Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death) **if you have a general anaesthetic**	Between 1 in 50 & 1 in 250 patients (your anaesthetist can estimate your individual risk)

What is my risk of a hospital-acquired infection?

Your risk of getting an infection in hospital is between 4 & 6%; this includes getting *MRSA* or a *Clostridium difficile* bowel infection. Individual hospitals may have different rates, and the medical staff can tell you the risk for your hospital. You have a higher risk if you have had:

- long-term drainage tubes (e.g. catheters);
- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

What can I expect when I get home?

- you will be discharged the same day with a catheter
- we will show you how to manage your catheter at home, and will arrange for its removal
- usually, you will have a tap on the end of the catheter to make it easy to manage, and to avoid the need for bags.
- you may see some blood in your urine
- some men will get some pelvic discomfort for a few days but this can be relieved by simple painkillers such as paracetamol
- you will be given advice about your recovery at home
- you may be given some antibiotics to take for a few days after the procedure; these will be dispensed from the hospital pharmacy
- you will be given a copy of your discharge summary, and a copy will also be sent to your GP
- you should be able to return to normal activities after five to seven days (or once the catheter has been removed).

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Once your catheter has been removed, your symptoms will slowly improve as the prostate shrinks. Sometimes, in the weeks after surgery, you may see some debris or small pieces of tissue in the urine as your prostate resorbs; this is quite normal.

Maximum improvement takes, on average, 8-12 weeks following the procedure, although it can take as long as 6 months in some patients.

It is helpful to start pelvic floor exercises as soon as possible after any form of prostate surgery; these can improve your control when you get home. Click the link above for further information on these exercises, or contact your urology Specialist Nurse.

General information about surgical procedures

Before your procedure

Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (warfarin, aspirin, clopidogrel, rivaroxaban or dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

Questions you may wish to ask

If you wish to learn more about what will happen, you can find a list of suggested questions called "Having An Operation" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home

We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.

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We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

Smoking and surgery

Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local NHS Smoking Help Online; or
- ring the free NHS Smoking Helpline on **0300 123 1044**.

Driving after surgery

It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to contact the DVLA if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

What should I do with this information?

Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

What sources have we used to prepare this leaflet?

This leaflet uses information from expert groups who carry out this procedure, consensus panels and other evidence-based sources including:

- the Department of Health (England);
- the Cochrane Collaboration; and
- the National Institute for Health and Care Excellence (NICE).

It also follows style guidelines from:

- the Royal National Institute for Blind People (RNIB);
- the Information Standard;
- the Patient Information Forum; and
- the Plain English Campaign.

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Disclaimer

We have made every effort to give accurate information but there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

> **PLEASE NOTE**
>
> The staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you do have any questions, you should contact your urologist, specialist nurse or GP.

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