

# Water vapour therapy (Rezūm®) for enlarged prostate

This leaflet explains the process of having water vapour treatment for enlarged prostate, including the benefits, risks and any alternatives. It also gives information on what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

## What is the prostate?

The prostate is only found in men and is a gland at the base of the bladder inside your pelvis. It is the size of a walnut. The urethra is a tube that carries urine from the bladder, through your penis, to the outside. The prostate surrounds the part of the urethra which is underneath the bladder.

## The male urinary system

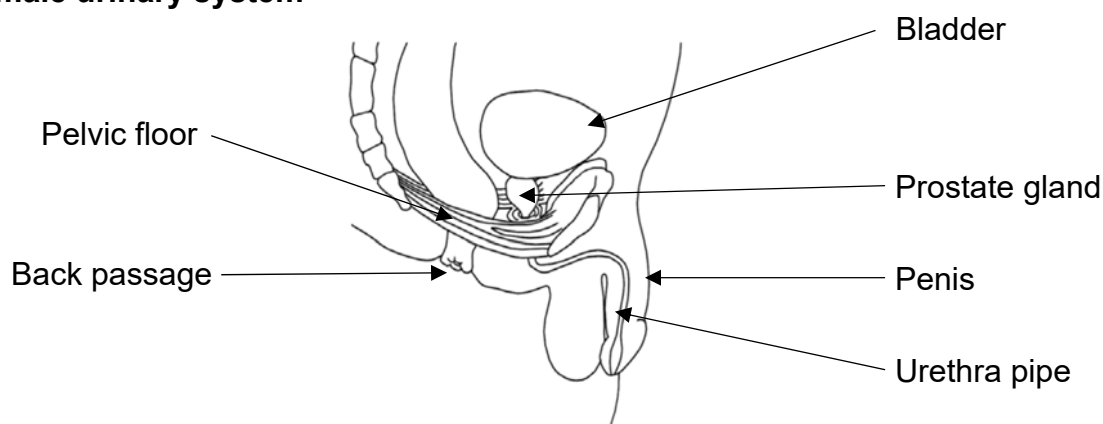


Image supplied by Prostate Cancer UK

## Why is my prostate enlarged?

As men get older, the cells of the prostate begin to swell, which increases the size of the prostate. This is called benign prostatic hyperplasia (BPH), which means extra growth of normal (non-cancerous) cells. This isn't usually serious, but sometimes the prostate grows so large that it puts pressure on your urethra (bladder outlet obstruction). This can make it difficult for you to pass urine (pee) and may cause other urinary symptoms such as:

- not being able to empty your bladder completely, so you may need to go to the toilet more often (frequency)
- having a weak urine flow
- having to strain to pass urine.

Because of the squeeze on your urethra, you may have to use a lot of pressure to pass urine. In the long term, this can damage your bladder and kidneys.

## What is water vapour therapy?

Rezūm water vapour therapy is a minimally invasive surgical treatment for benign (non-cancerous) enlargement of the prostate gland. The treatment involves the delivery of small amount of water steam into your prostate. During this treatment, a cystoscope (small tube) will be inserted into your urethra. This contains a small needle that will deliver the water vapour. The treatment takes about one hour. Any discomfort is usually treated with simple pain killers which may be given as required before, during or after the procedure.

## How does it system work?

It works by delivering sterile water steam into the prostate tissue with a special needle. The hot steam causes the prostate cells to die. Over a few weeks the enlarged part of the prostate shrinks in size which improves the flow of pee when the bladder is emptying.

## Why would I need this procedure?

Not everyone who develops an enlarged prostate will need treatment, and not everyone is suitable for water vapour therapy, but your consultant or nurse specialist has recommended it for you. Water vapour therapy is a relatively new type of procedure for treating an enlarged prostate. It will make it easier for you to pee and might relieve some of your other symptoms. If you don't have treatment, your prostate will continue to grow, which may make your symptoms worse and increases the possibility of problems with your bladder and/or kidneys.

## How long does it last?

Clinical studies currently show the results can last up to two years, and some studies are ongoing.

## Can I repeat this procedure?

If your symptoms return, your urologist can review you and see if repeating the treatment is a good option.

## Are there any alternatives to Rezūm?

There are several alternative treatment options outlined below. Your consultant or nurse specialist will discuss these options with you if they are suitable for your situation.

- Observation of your symptoms. Some men may want time to think about surgery, or to wait and see if their symptoms get any worse.
- Medicines. There are two types of medicine available. They either shrink your prostate or relax the muscles in your prostate and bladder to improve the flow of pee. The effects will only last as long as you take the medicines.
- Prostate arterial embolisation. This is a minimally invasive procedure that blocks the arteries that supply blood to the prostate. The procedure is performed under local anaesthetic. A radiologist uses an X-ray camera to guide delivery of small particles to block almost all of the prostate arteries. The particles are injected through a catheter (thin tube).
- Transurethral resection of the prostate (TURP) is the traditional minimally invasive surgery that involves removing (shaving) the enlarged prostate tissue. TURP is an effective treatment and has been around for more than 50 years. For more information about TURP, please ask for a copy of our leaflet: **Having a trans-urethral resection of the prostate.**

- Laser prostatectomy (HoLEP). This is an operation to remove the parts of your prostate that are pressing on your urethra, to make it easier for you to pee. It involves a surgeon inserting a tube down your urethra then using a laser to destroy the prostate tissue, or cut it into pieces. This operation is ideal for larger prostate glands. For more information about this, please ask for a copy of our leaflet: **Treating your enlarged prostate gland HoLEP (holmium laser enucleation of the prostate)**.
- UroLift® or transprostatic implant procedure. This is a minimally invasive surgical treatment for benign enlargement of the prostate gland. The treatment involves the delivery of small, permanent implants into your prostate without the need for removing any part of the prostate. There is a better chance in preserving sexual function and ejaculation over other surgical procedures that involve removing the prostate tissue (for example, TURP, HoLEP). Urolift® can be done under general anaesthetic, sedation or local anaesthetic.
- Open (traditional) surgery (Millin's prostatectomy). This is considered if your prostate is too large to be treated with Urolift®, TURP or HoLEP.
- Use of a permanent catheter. This is an option for men who don't want, or who are not suitable, to have water vapour therapy, UroLift®, TURP, HoLEP or prostate artery embolisation.

## What are the benefits of water vapour therapy

Studies show that Rezūm therapy offers a similar level of symptom relief as the other procedures and it is very safe, with fewer side effects than other procedures. However, unlike most other procedures, all patients who have Rezūm therapy need to have a urinary catheter for 4-10 days, depending on the size of the prostate. The common side effects are typically gone in four weeks or less.

Most other procedures (including TURP and HoLEP) can have permanent side effects, including loss of ejaculation, incontinence, scarring in the urethra and erectile problems. UroLift® leaves a permanent implant inside the body.

## What are the risks of water vapour therapy?

Side effects include some blood in the urine, pain when peeing, urgency, and possibly some urge incontinence. These are usually gone by four weeks or less.

## Preparing for water vapour therapy

It is important that you attend your pre-admission appointment, which is given to you when you are offered a date for the procedure. We will assess your suitability for surgery and anaesthetic at this appointment. You will not be able to have the procedure until you have had a pre-assessment and we think that you are well enough.

We no longer offer a routine appointment service – patients walk in from clinic.

You will come into hospital on the day of the procedure. You arrive at Nuffield ward (4<sup>th</sup> floor, Nuffield House) or the surgical admissions lounge (SAL, 1<sup>st</sup> floor, Tower Wing). You should be able to go home the same day.

When you arrive on the ward you will be seen by a nurse who will fill in any paperwork needed and carry out any further tests requested by your consultant's team.

If you smoke, you may be asked to stop smoking, as it increases the risk of developing a chest infection or deep vein thrombosis (DVT) (blood clot in a deep vein). Smoking can also delay wound healing because it reduces the amount of oxygen that reaches the tissues in your body. If you would like to give up smoking, please telephone the NHS Smoking Helpline (details at the end of this leaflet).

Please continue to take all your medicines unless you are told otherwise and remember to bring a list of them into hospital with you.

You will be expected to have recovered from anaesthetic or sedation and be confident looking after your catheter before you leave. The nurse will perform routine checks and show you how to look after your catheter before you are allowed to leave the hospital. You will be given contact phone numbers if you need help or advice when you are at home.

## Consent - asking for your consent

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

## What are the risks of the water vapour therapy procedure?

Although serious complications are rare, every procedure has risks. Your doctor will discuss these with you in more detail:

- **Blood when you pass urine.** This is quite common and can range from peachy coloured urine to rose, or rarely, claret coloured. Mild bleeding is rarely a sign of a serious problem. Blood in the urine is expected to last for few days and to clear gradually. Mild bleeding at the beginning when you pee and for a few more days is common. Increasing your fluid intake will usually help 'flush the system' and clear any bleeding. If there is persistent or heavy bleeding every time you pass urine you should go to your nearest Emergency Department (A&E).
- **Urinary symptoms.** It is possible that this procedure may cause internal bruising or swelling of the prostate that makes it difficult for you to pee. Sometimes you may have temporary incontinence of urine (leaking). This eventually settles (pelvic floor exercises may help, ask your nurse for a leaflet) within 2-3 weeks.
- **Urinary retention.** After the catheter is removed (see below) you may have difficulty peeing and may need the catheter for longer. If you stop passing urine, you will need to go to your nearest Emergency Department and you will require a catheter to be fitted to drain your bladder for few more days.
- **Infection.** Some people (3 out of 100 patients) develop a urinary infection after the procedure. If you feel a persistent burning sensation when you pee, with a temperature and/or feeling unwell, you need to contact us or your GP and, if out of working hours, the Emergency Department to have the infection treated.
- **Orchitis** (inflammation of the testicle). Rarely some patients may develop inflammation of the testicle following the procedure. If you experience swelling and pain in the testicle, you need to contact us or your GP and, if out of working hours, your nearest Emergency Department.

- **Erection problems.** Most patients who have good erections before the procedure would keep the erectile function, but you may develop loss of strength of erection or even complete loss of erections after this procedure. This risk is lower than for other prostate operations like TURP and HoLEP. If you do develop any erection symptoms, please let us know at the next appointment, where we will be able to assess the problem and may recommend some treatment.
- **Semen emission problems (ejaculation).** Most patients who have no ejaculation problems before this procedure are expected to keep their ejaculation, but some patients may develop loss of volume of ejaculate or even the complete loss of ejaculation. This risk is lower than for other prostate operations like TURP and HoLEP. Although it is uncommon, if you develop changes in ejaculation after this procedure, it is likely to be permanent.
- **Allergic reaction.** It is possible that you may have an allergic reaction to the medication we give you. Although the risk of this is low (less than 1 in 1,000 cases), you can reduce this risk by letting us know if you have had any previous allergic reactions to any medications or food.
- **Failure of procedure.** Some patients who have this procedure will need another, different treatment one year after the procedure.
- **Injury to the urethra.** Occasionally, during this procedure, your urethra may get damaged. This usually heals itself. Rarely, the urethra may develop scarring and narrowing. This risk is lower than for other surgical procedures for BPH (for example, TURP and HoLEP).

## Preparing for the procedure

Before you have water vapour therapy you should let the doctor or specialist nurse know if you:

- are taking any medications, particularly antibiotics or anticoagulants (medication that helps to prevent blood clots from forming), including aspirin, warfarin, clopidogrel, rivaroxaban or dipyridamole
- have allergies to any medications, including anaesthesia
- have ever had bleeding problems
- have an artificial heart valve.

You should continue to take all of your medications as normal, unless you have been told otherwise by the doctor who organised your procedure.

## Will I have an anaesthetic for the procedure?

This procedure is often done under local anaesthetic using a gel to numb the urethra. In some circumstances, you may have some sedation as well. A sedative is a medication that will make you feel sleepy during the procedure. Occasionally this procedure is done under general anaesthetic, which means that you will be asleep during the whole of the procedure. Your doctor or specialist nurse will discuss the options with you before you have your procedure. For more information see our leaflet, **Having an anaesthetic**. Please ask a member of staff for a copy.

## What happens on the day of my procedure?

Once you have been admitted to the ward, you will see your urology doctor or nurse specialist, who will go through the procedure again with you and ask you to sign the consent form. If you are having the procedure under sedation or general anaesthetic, you will see the anaesthetist as well.

## What happens after the procedure?

All patients undergoing this procedure will need a catheter for 3-8 days afterwards. Some patients with a larger prostate may need the catheter for longer. A catheter is a hollow, flexible tube that is inserted through the penis opening going up into the bladder to help it empty the bladder contents.

If you have had a local anaesthetic you will wait in your room on the ward for a few hours until you recover from the anaesthetic. Once you have recovered you will be allowed to leave, but you will be asked to rest for the rest of the day.

If you have had sedation or general anaesthetic you will need someone to take you home, as your muscles may ache and you may feel dizzy. General anaesthetic takes 24-48 hours to wear off, so please rest for this time.

## What do I need to do after I go home?

Once you are home, you need to look after your catheter. We will teach you how to do this before you leave hospital. You may have mild discomfort when peeing for 1-2 days afterwards. You will also notice some blood in your urine for a few days. Your semen may be discoloured as well. This is nothing to worry about. You should drink plenty (1½-2 litres) of non-alcoholic, clear fluids while you have blood in your urine. You should avoid heavy lifting and straining when on the toilet. You will need to stay hydrated and increase your fibre intake to avoid constipation after this procedure). Most patients are able to return to normal activities about nine days after this procedure.

Go to your nearest Emergency Department (A&E) if:

- your pain increases
- you have a fever higher than 100.4F (38C)
- you do not pee for eight hours and/or you are unable to pee with a full bladder (after the catheter removal)
- you start to pass large clots of blood
- you have persistent bleeding.

## Will I have a follow-up appointment?

Before you leave the department, the nurse will give you an appointment to come back in 3-8 days to have your catheter removed. You will also get an appointment for 6-12 weeks for a review in clinic (this will be sent to you in the post).

### Contact us

If you have any questions or concerns about Rezūm, please contact the prostate nurse specialists, **t:** 020 7188 9339, **e:** ProstateCNS@gstt.nhs.uk, Monday to Friday, 9am-5pm. Out of hours, please contact Florence ward, **t:** 020 7188 8818.

The hospital stop smoking service, **t:** 020 7188 0995, or  
The NHS Smoking Helpline, **t:** 0300 123 1044.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit **w:** [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

## Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

**t:** 020 7188 8748, Monday to Friday, 9am-5pm

## Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

**t:** 020 7188 8801 (PALS)      **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

**t:** 020 7188 3514 (complaints)      **e:** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

## Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch.

**t:** 020 7188 8815      **e:** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

## NHS 111

This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111      **w:** [www.111.nhs.uk](http://www.111.nhs.uk)

## NHS website

This website gives information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.

**w:** [www.nhs.uk](http://www.nhs.uk)

## Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.

**t:** 0800 731 0319      **e:** [members@gstt.nhs.uk](mailto:members@gstt.nhs.uk)      **w:** [www.guysandstthomas.nhs.uk/membership](http://www.guysandstthomas.nhs.uk/membership)

### Was this leaflet useful?

We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form,

**w:** [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets), or **e:** [patientinformationteam@gstt.nhs.uk](mailto:patientinformationteam@gstt.nhs.uk)

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