



## Rezūm treatment for BPH (Benign prostatic hyperplasia)

### Information for patients, relatives and carers

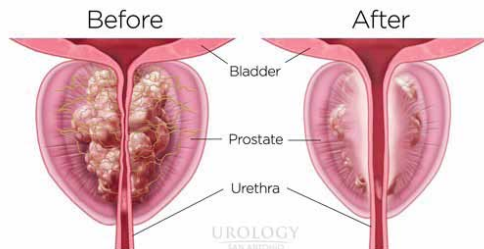
This booklet has been provided to help answer some of the questions you may have about your enlarged prostate and the Rezūm procedure we are offering you. It explains what Rezūm is, what other treatment options are available, as well as what to expect before, during and after the Rezūm procedure.

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THE NEW WAVE IN BPH TREATMENT

## What is BPH?

Benign prostatic hyperplasia (BPH) is a non-cancerous enlargement of the prostate gland. The prostate gland produces ejaculatory fluid and sits inside the pelvic area close to the bladder. As the prostate enlarges it can cause BPO or benign prostatic obstruction by pressing on the urethra (water pipe) or bladder, with associated troublesome lower urinary tract symptoms (LUTS). The symptoms often come on slowly over several years and is increasingly common as men get older. It is estimated to increase from 50% for men between 50 and 60 years old, to over 70% for men older than 70. In some cases, the symptoms can be very mild and do not require treatment. BPH with associated lower urinary tract symptoms (LUTS) is increasingly common as men get older. It is estimated to increase from 50% among men between 50 and 60 years old, to 70% for men older than 70.

Treatment options usually include making lifestyle changes for mild symptoms, as well as medication and surgical procedures such as TURP (transurethral resection of the prostate) or laser prostatectomy for men with more severe symptoms or complications of prostate enlargement, such as urinary infections or an inability to pass urine (urinary retention). There are also now minimally invasive surgical options or treatments (MIST's). One of these treatments is called Rezūm water vapour therapy.



## What is Rezūm?

Rezūm is a surgical treatment which involves a special machine using steam to ablate (remove) the particular part of the prostate that enlarges (this is called the transition zone) and causes symptoms due to BPH.

The machine consists of a portable radiofrequency (RF) generator and delivery device that is passed into the body via your urethra (water pipe). A telescopic lens within the device allows us to guide the treatment to where it is needed. The number of treatments delivered at the time of the procedure depends on how large your prostate is.

RF energy from the generator is applied to an inductive coil in the delivery device to heat up a measured amount of water outside of the body, which then converts the water into vapour or steam. This is then passed into the prostate tissue via a tiny needle with emitter holes to ablate the area which causes BPH. Please note that no RF energy is delivered into the body. After the treatment the prostate tissue reduces in volume and takes the pressure off the urethra (water pipe) and bladder.

The procedure takes approximately three to seven minutes to complete and patients are normally able to go home the same day. Rezūm is often done under a local anaesthetic (you will be awake but the urethra and prostate will be numbed) but it can be done while you sleep under a general anaesthetic. It is sometimes advantageous to perform the procedure under anaesthetic if you haven't already recently had a cystoscopy (camera examination), or if the prostate gland is very large. The procedure takes in total between 20-25 minutes.

In comparison with other treatments, which have a longer recovery period, you should be able to resume normal activities within a few days. You should notice improvements within three weeks, although it may take up to six months to obtain the full effect.

## Is it safe?

The generator has a number of safety features to ensure proper heating and thermal ablation of the targeted prostate tissue, while protecting the urethra during treatment. The temperature of the vapour/steam is monitored throughout and the person operating the device is in full control of delivering the treatment to the targeted area.

Throughout the procedure, saline (salty water) is running to help the surgeon obtain a better view inside of your body.

Rezūm was granted approval by NICE (National Institute for Health and Clinical Excellence) in June 2020.



NICE has made positive recommendations in terms of the cost-effectiveness of the procedure and has recommended centres around the UK incorporate this into their practice. The first cases in the UK were performed in 2017. At least 20 centres in the UK are currently offering this in the NHS.

There have been several clinical studies on the benefits of the Rezūm system and we can give you details of them on request. This includes a recent publication in the British Journal of Urology International. The latest results of the five year trial can be read [here](#)

## Are there any risks associated with having Rezum?

There are of course risks with all procedures on the prostate gland including Rezum. These include the risks associated with the anaesthetic as well as the procedure. Bleeding and urinary tract infections after the procedure are not uncommon, as well as discomfort passing urine. It does take up to 3 months to notice an improvement in symptoms. This is not the case with some of the other options where the improvement is often noticed within the first few days after catheter removal.

It is important to be aware that a catheter will be required for a few days after the operation. The duration will depend on the size of your prostate gland but it can commonly be left in for 3-10 days and sometimes longer. It is possible that the first time the catheter is removed it may not be possible to pass urine initially. We recommend that any prostate medication be continued for the first month after the treatment in order to reduce the likelihood of difficulties in the first few weeks. It can take over 4 weeks for the majority of the swelling to settle. We would also recommend abstaining from ejaculating for 2 weeks after the procedure, to reduce the risk of bleeding. It would be normal for there to be some blood in the urine and ejaculatory fluid for the first 4 weeks intermittently.

One of the attractions of Rezum is that it can be carried out under local anaesthetic (LA), or with sedation and the procedure takes under 20 minutes to perform. Furthermore, it is very unlikely to upset the sexual function or ejaculatory function. The likelihood of erectile deterioration after the procedure is rare, but it is important to understand that between 3-5% of men will notice some changes in the volume or force of the ejaculation (or both). It is our experience that 1 or 2 men in every 100 will experience completely dry ejaculation after the procedure. We have modified our technique to try and minimise the likelihood of this occurring. Of course, many men are already experiencing problems with ejaculation prior to the procedure and it is possible for the ejaculation to improve after the procedure.

We don't know how long the benefits of the procedure will last in the long term as this treatment has only been available for almost 7 years in the US and 4 years in the UK. We suspect that the likelihood of further prostate surgery being required in the long term to be higher than for TURP or laser treatments. Incontinence is very rare but will also need to be discussed as part of the consent process. A small proportion of men will require a second procedure in the first year (2.5%), in order to obtain the maximum benefit. The overall re-treatment rate (proportion of men requiring another procedure) from the US trial data is 4.4% at 5 years. Therefore, fewer than 1 in 20 men will require a second procedure in the first 5 years after the operation.

Although we do offer this procedure to some men in retention of urine (with a catheter or using intermittent catheterization), it is to be noted that there is less evidence at this time to support its routine use in this scenario.

## What happens if I decide to have Rezūm?

We will offer you a date for the procedure, and an appointment for the pre-assessment clinic. If you have not already had a urine flow test, we will arrange this. If you are currently taking blood-thinning medication (such as warfarin), we may ask you to stop taking it for a few days before your treatment.



### On the day of surgery

We will ask you to come in on the day of your operation. Although the procedure only takes a few minutes, you should expect to be at the hospital for a few hours, longer if you are having a general anaesthetic. It is very likely that you will be able to go home the same day. Most men will be discharged within 8 hours of admission. We will discuss the procedure with you in detail again on the day and ask you to sign a consent form.

If you are awake and having the procedure under local anaesthetic, you may be aware of an ultrasound probe being passed into the rectum to measure the prostate gland at the start of the procedure. You may also be aware of the camera being passed down the urethra during the treatment. When we pass the Rezūm equipment through your urethra (water pipe) using plenty of anaesthetic gel, it may momentarily sting. After a quick inspection of the bladder, we will start the Rezūm treatment.

At the end of the procedure you will have a catheter left within your bladder for a few days to drain the urine away without the need for you to pass urine yourself and also allow the prostate to adjust to the treatment and for any swelling to go down. You may be given a tap or valve to attach to the catheter.

### When can I go home?

After the procedure, a member of the urology team will discuss the operation with you. They will give you a date to return to hospital for removal of your urinary catheter, as well as advise you on how to look after yourself at home. You are usually in the hospital for less than 8 hours. 1-2% of men do stay overnight.

## **What to expect when you get home.**

It is normal to have some pain and discomfort after surgery, and we will advise you on the most appropriate pain killers to use.

If you have a temperature after the procedure with shivers and shakes you may require antibiotics and so we would advise you to contact the hospital where you had the procedure. If there is bleeding and blood clots we would also ask you to seek help.

## **When can I get back to normal?**

You can return to work as soon as you feel comfortable to do. If you need a sick certificate or have any queries about this, please speak to your surgeon before we discharge you home. Some patients have returned to work within a few days. Most will take 1 week off, some longer.

You should be able to resume most of your usual activities within a few days. It is normal to see a small amount of blood in the urine after this procedure for 4 weeks and sometimes longer. Burning when passing urine can come and go. This responds well to anti-inflammatory painkillers.

You can resume sexual activity once the catheter has been removed and you feel comfortable to do so. We tend to advise waiting 2 weeks before ejaculating. Please do not worry if you see blood in your semen which may also be visible for a long as 3 months.

## **Will I need to return to hospital?**

Yes, we will ask you to return to have your catheter removed. This appointment will be arranged when you come in for your procedure. Please try to have a full bladder when you come for this appointment, so that your stay will be as short as possible.

Once we have removed the catheter, we will ask you to empty your bladder. We monitor how much you void and then do a bladder scan to detect any urine remaining in your bladder. If the nurse is happy with the results, we will discharge you from the ward. However, if there are any problems, we may need to leave the catheter in for a further period of time.

## What to expect following the catheter removal (Trial without catheter TWOC)

After catheter removal once you have been discharged home it is important to be aware of the following;

- For 24-48 hours the flow may deteriorate before it starts to improve
- Blood in the urine is normal particularly for the first few days
- Increasing fluid intake can help the urine to clear
- Avoiding heavy lifting or straining is sensible
- Burning when passing urine is not uncommon and this can occur at any time in the first 6 weeks – this responds well to anti-inflammatory painkillers and avoiding drinks which irritate the bladder such as fruit juices and caffeine containing drinks
- Please try not to get constipated – straining to open the bowels can trigger bleeding and the passage of blood clots

Blood at the start of the urinary stream is normal particularly in the first few weeks. This can last as long as 6 weeks. If the urine becomes a dark rose colour or red with clots it is important to rest and take fluids, and if this doesn't settle within 24 hours please contact the ward.

It is normal to pass some debris in the first few weeks –  $\frac{1}{3}$  of men will pass small bits of prostate tissue in the urine. This is more common if the median lobe has been treated (not all men have a median prostate lobe).

It is possible that pads may be required to absorb any potentially embarrassing leakage particularly in the first 2-3 weeks. This is something that will settle over time.

## Continue to look out for the following:

- If you get a fever (high temperature) in the first few weeks – please consult the ward or contact your local GP. Further antibiotics may be required to treat a urinary tract infection.
- If you are unable to pass urine and it becomes painful at any time in the first week you may need another catheter for a few days. This doesn't happen very often.
- If there is dark blood passing from the urethra with clots and it is uncomfortable you may require urgent review if it is not settling.

## After 4 weeks

You no longer need to avoid heavy lifting or sexual intercourse.

It is normal for the improvement in the urinary symptoms to be quite slow but usually some improvement in the flow has occurred by this stage.  $\frac{1}{4}$  of men will still be having some difficulties with increased urinary urgency and frequency at 6 weeks. To get the full benefit of Rezum can take as long as 6 months.



## Frequently asked questions

### When should I stop my prostate medication?

It is sensible to stop the medication 4 weeks after the procedure. If the prostate is very large then this may be extended to up to 3 months.

### Is it normal to have blood in the ejaculation fluid?

Yes this is normal and can take several weeks for ejaculations to settle.

### Is it likely to be a slower recovery if my prostate was large before the procedure?

The bigger the prostate the longer it can take to see an improvement and it can be a bit more uncomfortable in the first week or two. As additional injections of steam are required for a bigger gland it will be more swollen to start with.

### What happens if my symptoms initially improve and then deteriorate within the first 3-6 months?

Occasionally this can happen in the first few months following the Rezum procedure. This can be due to the healing process and sometimes a piece of dead prostate tissue can cause a partial blockage. This is not difficult to deal with but it is important to notify your Urologist if this occurs.

### Is there a limit to the size of gland treated?

We would recommend gland volumes are less than 100mls in size ideally. The data would suggest that the best results are for those with a gland volume of less than 80 mls. This will be assessed before your procedure. We can treat larger glands but there are usually other options which may be superior for very large prostates.

### How much time will I need off work?

This does depend on the type of work. If there is quite a lot of travelling and exercise we would recommend 2 weeks from the time of surgery. Some men are able to return to a desk job within 2-3 days of the procedure whilst others will prefer to wait until after the catheter has been removed.

## Your feedback is important to us

### Comments, concerns, compliments and complaints

If you have any comments, concerns, compliments or complaints about your care, please let us know as soon as possible. Please speak to the urology specialist nurse so that we can help to resolve your concerns quickly.