



## **Rezūm procedure for the Prostate**

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This booklet has been provided to help answer the questions you may have with regards to your enlarged prostate and the Rezūm procedure that is being offered to you.

It explains what Rezūm is, what treatment options are available, as well as what can happen if you choose to undergo a Rezūm procedure.

Jas Kalsi is a consultant urological surgeon and expert in minimally invasive treatments for enlarged prostates.

### **What is BPH?**

Benign prostatic hyperplasia (BPH) with associated lower urinary tract symptoms (LUTS) is a common medical condition as men get older. The incidence has been estimated to increase from 50% among men between the ages of 50 and 60 years, to 90% for men older than 80 years of age. For men with more severe symptoms or complications of prostate enlargement such as urinary infections or a complete stoppage (urinary retention), surgical procedures such as laser prostatectomy (HoLEP) or TURP are recommended.

### **What other treatment options are available?**

The initial approach in managing bothersome symptoms is to employ conservative lifestyle measures such as:

Fluid intake management, Avoiding caffeinated drinks, Pelvic floor exercises.

Attention to detail in assessing fluid intake and voiding habits can significantly improve some patients' perception of their symptoms.

However, commonly medication is prescribed as a first line treatment option.

### **Medication**

For many men, medications such as alpha blockers are the first line approach to control mild-to-moderate symptoms of BPH. These symptoms include frequent urination and getting up at night as well as a deterioration in the flow of urine often with hesitancy and sometimes with a feeling of incomplete emptying.

### **Issues**

Many men begin medical therapy but have:

- Inadequate or short-lived improvement in their symptoms and quality of life
- Undesirable side-effects that lead to discontinuation

such as light headedness and sexual problems

Increasingly, men do not want to commit to a lifetime of medical treatment, particularly as they are often taking other medication and there can be concerns relating to interactions between tablets.

Remembering to take the tablets can also be an issue. Many men take medication for several years before going on to have surgery. Increasingly minimally invasive surgical treatments are being offered to men with moderate symptoms, in patient reluctant to take/continue medication and those who have a desire to return to normal activities quickly.

#### **Minimally Invasive Procedures:**

At the present time there are other options. The results with Transurethral microwave thermotherapy (TUMT) and Transurethral needle ablation using radiofrequency thermotherapy (TUNA) are at best modest and prostatic stents continue to cause problems.

The use of Implants to retract enlarged prostate tissue (UroLift®) is gaining popularity but not all prostates are suitable for this procedure, which depends on the size and shape of the prostate gland.

#### **Endoscopic surgery**

The removal of prostate tissue is called a prostatectomy and when there is benign (non cancerous) prostate tissue causing a blockage, the central component of the prostate is removed one way or another in order to allow urine to flow more easily from the bladder.

For men with severe BPH symptoms including retention of urine, Transurethral resection of the prostate (TURP) was the the gold standard for a long time but increasingly this has been superseded by laser enucleation (Holmium laser enucleation of the prostate HoLEP) or vaporization (PVP using the 180W greenlight laser). These laser technologies remove prostate tissue by different means.

With all surgical procedures there are complications, side effects and risks as outlined below.:

- Retrograde ejaculation (dry ejaculation)
- Erectile dysfunction (impotence)
- Urethral strictures or scarring
- Bleeding (occasionally requiring a transfusion)
- Urinary infection (UTI)

It is often 4-6 weeks before patients can return to normal activities and regular exercise.

#### **What is Rezūm?**

Rezūm is a method by which steam energy is used to ablate (or remove) the particular part of the prostate that enlarges and causes symptoms due to BPH. Specific technical information is explained below.

This system consists of a portable radiofrequency (RF) generator and delivery device that is introduced into the body via the urethra (transurethral approach) and guided by direct visualization through a telescopic lens placed within the delivery device.

RF energy from the generator is applied to an inductive coil in the delivery device to heat up a controlled amount of water outside of the body, converting the water into vapour or steam. The thermal energy created outside the body is delivered into the prostate tissue through a tiny needle with emitter holes to ablate (remove) the targeted obstructive prostate tissue that causes BPH. The procedure takes less time than standard surgery (15-30 minutes) and can be performed in a Day Surgery setting. No RF energy is delivered into the body.

Throughout the insertion of the device and during the treatment, saline irrigation is used to help ensure better views and to prevent the urethra from overheating.

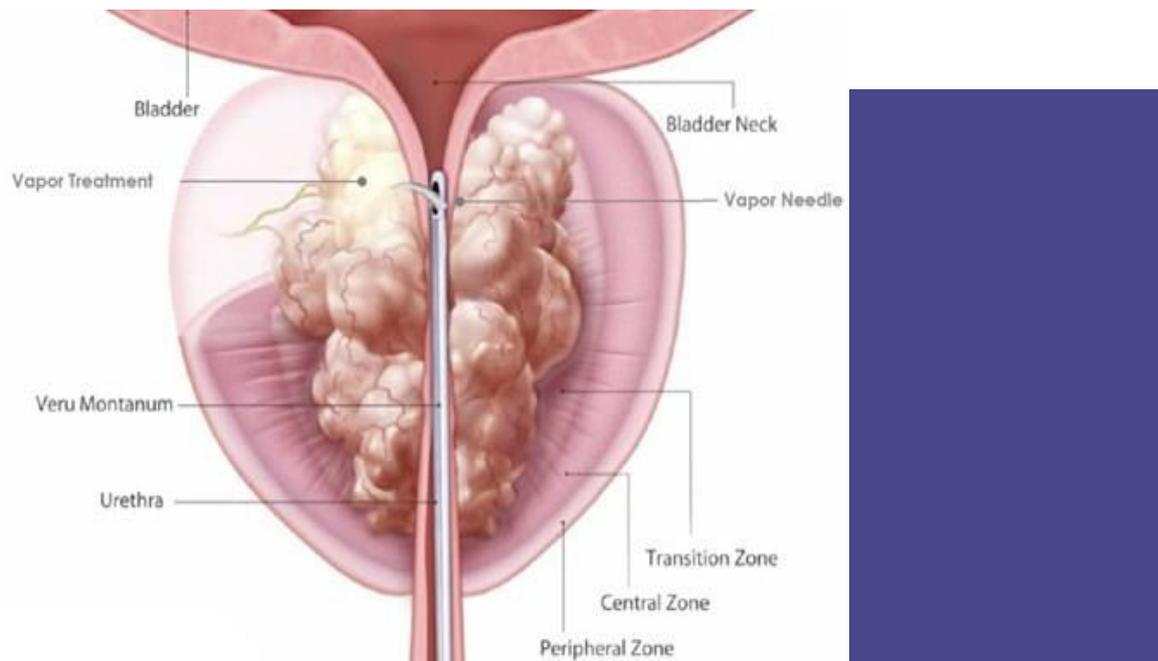
The generator has a number of safety features to ensure proper heating and thermal ablation of the targeted prostate tissue, while protecting the urethra during treatment. Thermocouples in the delivery device monitor temperatures to ensure consistent delivery of thermal energy into the ablation region. The length of the vapour needle is fixed and the operator controls all functions of the device. Placement of the vapour needle within the prostate is done under direct visualization through the telescopic lens, which is in the urethra inside the prostate.

The Rezūm System is intended to relieve the symptoms of obstruction and prostate tissue associated with BPH and is indicated for men with prostatic urethra lengths >2.0 cm and prostate volumes >20 cm<sup>3</sup>. The Rezūm System is also indicated for treatment of prostates with a median lobe or elevated central zone tissue.

#### **What approvals does Rezūm have?**

The Rezūm System received CE Mark on 8<sup>th</sup> July 2013 and FDA clearance for use in the USA on 27<sup>th</sup> August 2015.

Rezūm was approved by NICE in the UK in August 2018.



### What evidence of the benefits of Rezūm are available?

There have been several clinical studies undertaken on the benefits of the Rezūm System and we can give you details if you would like to review them.

### What happens next?

You will be offered a date for the procedure and also for a pre-operative assessment if a general anesthetic is going to be used. If you have not already done a flow test, this will be performed as well as completing the questionnaires. If you are on blood thinners you may be asked to stop taking them for a period prior to your treatment.

### Treatment day

You will have been given a time to attend the hospital. Even though the procedure only takes a few minutes, you will probably be at the hospital some time before and after the procedure, again depending on the anaesthetic used. It is very likely that you will be discharged home the same day or early the next day. Your consultant will see you before the procedure and ask you to sign consent forms.

### The treatment

About an hour before, you will be given some strong painkillers as well as some antibiotics which you will continue at home. You will then be accompanied to theatre where the procedure will take place. If you are having a general anaesthetic you will be sent to sleep.

The Rezūm equipment is then passed through the urethra using plenty of anesthetic gel. After an inspection of the bladder, the treatment will begin.

On completion a catheter will be left within your bladder for a few days prior to voiding as the prostate readjusts to the treatment and the swelling subsides. An antibiotic and pain killing suppository will be inserted into your rectum at the end.

### **When can I go home?**

After your procedure, you will be reviewed by a member of the urology team who will discuss the operation, any specific requirements for you at home and a plan for your aftercare. A date will be given to you as when to return for the catheter removal as well as the care required whilst at home.

It is normal to have some pain or discomfort after operations, and we advise you on painkillers to help keep it under control.

Return to work as you feel comfortable depending on your job. If in doubt please check with your surgeon and obtain a certificate, before you are discharged.

When you attend for catheter removal, please try to arrive with a full bladder so that your stay will be as short as possible. The tube will be removed and then when you are ready you will be asked to void into the flow machine and the bladder scanner will detect any remaining volume of urine. If the nurse is happy with the results you will be discharged.

If there are any problems you may require a further period of catheterisation or be taught intermittent self catheterisation.

Within a few days you will be able to resume normal activities and should notice improvements within 2 weeks, although it may be 3 months before the full benefit is evident. Blood may be visible in the urine and ejaculation fluid.

### **When can I resume sexual activity?**

Once the catheter has been removed and you feel comfortable. Do not be surprised if you see blood afterwards.

### **Side Effects**

As a minimally invasive procedure, Rezūm has demonstrated fewer side effects compared to those typically seen with surgical therapies, but as with any interventional procedure, some of the following side effects may temporarily occur:

- Painful urination
- Blood in urine
- Blood in semen
- Frequent urination
- Inability to urinate or completely empty the bladder
- Need for short-term catheterization

Most of these events resolve within 3 weeks of the procedure, but there is a possibility some of these effects may be prolonged.

## Useful contacts

Urologynow Private Secretaries 01753665415

[www.urologynow.co.uk](http://www.urologynow.co.uk)

Your feedback is important to us.

Comments, concerns, compliments and complaints - If you have any feedback you would like to provide, please speak to a member of staff as soon as possible or alternatively, email us

[info@urologynow.co.uk](mailto:info@urologynow.co.uk)

## What should I do with this information?

Thank you for taking the trouble to read this booklet. You will be asked to keep a copy for your own records and sign below to acknowledge this. If you do agree to go ahead with the scheduled procedure, you will be asked to sign a separate consent form that will be filed in your hospital records; we can give you a copy of this consent form if you ask. This booklet will help you decide whether you wish to go ahead with the proposed treatment by giving you clear information about the alternatives, the success rates and possible complications. By signing the consent form you should be assured that you as the patient have made a balanced judgement to proceed and are aware of any risks that are material to you.

I have read this booklet and I accept the information it provides.

Signature..... Date.....

