****East Kent Hospitals NHS Trust****

****Urology Department****

****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 can happen if you consent to this type of surgery.

# What is BPH?

Benign prostatic hyperplasia (BPH) is a non-cancerous enlargement of the prostate gland. BPH with associated lower urinary tract symptoms (LUTS) is common in older men. 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).

# What is Rezūm?

Rezūm is a surgical treatment in that involves a special machine using steam to ablate (remove) the particular part of the prostate that enlarges 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.

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.

The procedure takes approximately three to seven minutes to complete and patients are normally able to go home the same day. Rezūm is usually 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.

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 two weeks, although it may take up to three 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, as well as to prevent your urethra from overheating.

There have been several clinical studies on the benefits of the Rezūm system and we can give you details of them on request.

**Are there any risks associated with having Rezūm?**

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 3-5 days. 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.

The attraction of Rezum is that it can be performed 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 studies so far demonstrate very low need for further procedures (4% at 4 years post operatively) or going back on to medication (5%). Incontinence is very rare but will also need to be discussed as part of the consent process.

# What other treatment options are available?

Lifestyle changes and reassurance

For men with concerns about prostate cancer and mild symptoms, reassurance and advice on diet is usually all that is required. This is known as a ‘watch and wait’ approach and is used with many men diagnosed with BPH. Treatment usually occurs once bladder symptoms interfere significantly with quality of life.

Medication

For many men, medications such as alpha blockers are used to control mild to moderate symptoms of BPH. These symptoms include frequent urination and getting up at night, as well as deterioration in the flow of urine often with hesitancy and sometimes with a feeling of incomplete emptying. Choosing the correct medication for BPH is often complex.

Disadvantages of treatment with medication

* Inadequate or short-lived improvement in symptoms and quality of life
* Undesirable side effects, such as light-headedness or sexual problems.

You may not want to commit to lifetime treatment with drugs, particularly if you are already taking other medication. Remembering to take the tablets can also be an issue.

**Minimally invasive procedures**

There are options other than Rezūm:- These include prostate artery embolisation, this is performed by a radiologist. It tends only to be reserved for those with extremely large prostates, or who are too frail to be considered for other options.

Urolift, a procedure that uses implants to retract (lift) parts of the enlarged prostate out of the way and thereby prevent it from blocking the urethra, is gaining popularity. However, not all prostates are suitable for this procedure as it depends on the size and shape of the prostate gland.

TURP (transurethral resection of the prostate)

This is a type of endoscopic (keyhole) surgery can be used when there is benign (non-cancerous) prostate tissue causing a blockage. The central part of the prostate is removed, which will allow urine to flow more easily from the bladder. For men with severe BPH symptoms, including retention of urine, TURP has been commonly used for a long time.

This uses electricity and a wire to scoop out prostate tissue and is the most common procedure offered to men in the UK.

Increasingly men are put off having this procedure as there is a small risk of major complication (1%) as well as a risk of requiring a blood transfusion (1-2%). It can also upset the sexual (erectile) function in 5-10% and will cause a drier ejaculation in over 75%. Scarring of the urethra afterwards is also more common after this procedure. Incontinence is rare. This hospital stay is usually 2-3 days and so is seldom possible as a day case procedure. It is often six weeks before men can return to normal activities and undertake regular exercise after having TURP.

Laser treatment

Patients are increasingly considering alternative treatments using lasers to remove excess prostate tissue, which include procedures known as enucleation (using Holmium laser) or vaporization (PVP using Greenlight laser). Again the risks and side-effects include infection and bleeding although this is less likely with the Greenlight laser as the laser seals blood vessels during the procedure. Usually men are in hospital for less than 1 day but perhaps with an overnight stay for some. The chances of a deterioration in sexual function after the procedure are less than for a TURP (1-3%), but retrograde (dry) ejaculation is still common (over 50%). Incontinence is again rare.

**What happens if I decide to have Rezūm?**

We will offer you a date for the procedure and if you are having a general anaesthetic, 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.

We will discuss the procedure with you in detail and ask you to sign a consent form. About an hour before the operation, we will give you some strong painkillers as well as antibiotics which you will need to continue at home. After that, we take you to the operating theatre and give you a general anaesthetic if you are having one.

If you choose local anaesthetic, this will be with painkilling gel inserted up the water pipe into the prostate, given just before the procedure.

We will then pass the Rezūm equipment through your urethra (water pipe) using plenty of anaesthetic gel, which may momentarily sting. After a quick inspection of the bladder, we will start the Rezūm treatment.

At the end of the procedure, we will insert an antibiotics and pain killers (this may include a pain killing suppository into your rectum). You will have a catheter left within your bladder for a few days to drain the urine 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 discharged within 1-2 hours of the procedure.

# Is there anything I need to watch for at 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 contact your GP. 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.

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 4-6 weeks.

You can resume sexual activity once the catheter has been removed and you feel comfortable to do so. Please do not worry if you see blood in your semen. It may also be visible in the ejaculation fluid for a long as 3 months, this is of no concern for up to 6 weeks after surgery.

# Will I need to return to hospital?

Yes, we will ask you to return to have your catheter removed.

Once we have removed the catheter, we will ask you to empty your bladder into the flow machine and the bladder scanner will detect any urine remaining in your bladder. If the nurse is happy with the results, we will discharge you from the clinic. However, if there are any problems, we may need to leave the catheter in for a further period.

# 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 nurse in charge, ward sister or matron so that we can help to resolve your concerns quickly.

**Mr Edward Streeter, March 2020**

**East Kent Hospitals NHS Trust**