



# Robotic Aquablation treatment for benign prostatic hyperplasia (BPH)

This leaflet aims to answer any questions you may have about your enlarged prostate and the Aquablation procedure that is being offered to you. It explains what treatment options are available, and what you can expect if you opt for Aquablation. We will ask you to sign a consent form before the procedure if you decide to go ahead with surgery so it is important that you understand what Aquablation involves.

#### What is benign prostatic hyperplasia (BPH)?

Benign prostatic hyperplasia (BPH), also called an enlarged prostate or benign prostate enlargement (BPE), is a common medical condition in older men. BPH can cause lower urinary tract symptoms, which include frequent or urgent need to pee, peeing more often at night, trouble starting to pee, weak urine stream, or a stream that stops and starts, dribbling at the end of urination and not being able to fully empty the bladder. The incidence of BPH has been estimated to increase from 50% (5 out of 10 cases) among men between the ages of 50 and 60 years, to 90% (9 out of 10 cases) for men older than 80 years of age.

Traditional treatment or management options for mild symptoms include making lifestyle changes. For men with more severe symptoms or complications of prostate enlargement, such as urinary infections or a complete stoppage (urinary retention), medication and surgical procedures such as transurethral resection of the prostate (TURP) or laser prostatectomy (where a laser is used to remove excess tissue from your prostate gland) may be considered.

# What are the treatment options for BPH?

- Life-style changes and reassurance: A "watch and wait" approach is used for many men diagnosed with BPH and advice regarding diet is usually all that is required to treat mild symptoms of BPH.
- **Medication:** Medications such as alpha blockers are used to treat mild or moderate symptoms, such as 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. Medication treatment can have disadvantages such as:
  - Inadequate or short-lived improvement in symptoms and quality of life.
  - Undesirable side-effects, such as light headedness and sexual problems.
  - Possible interactions with other medication, and the long term commitment to taking tablets.

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Increasingly, minimally invasive surgical treatments are being offered to men with moderate symptoms.

- **Minimally invasive procedures:** Medication and surgical prostatectomy (removal of prostate tissue using a scope) procedures may be considered for treating more severe symptoms or complications of prostate enlargement, such as urinary infections or a complete stoppage (urinary retention). The usual procedure is a transurethral resection of the prostate (TURP), but alternatives include:
  - For suitable cases depending on the size and shape of the prostate, use of implants called UroLift® to retract enlarged prostate tissue (the implant lifts and holds the two sections of the prostate apart).
  - The Rezum procedure, using endoscopic steam energy to remove part of the prostate.
- Endoscopic surgery: The removal of prostate tissue using a scope is called a prostatectomy and when there is benign (non-cancerous) prostate tissue causing a blockage, most, or all, 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, a procedure called a transurethral resection of the prostate (TURP) has been the standard treatment for a long time, but increasingly men are looking at the alternatives. These include laser enucleation (Holep) or vaporisation (PVP using the 180W greenlight laser). These technologies remove or vaporise prostate tissue by laser and may be done as a day case.

With all surgical procedures there are complications, side effects and risks. One study showed that 13.5% men (27 out of every 200) needed unplanned readmission to hospital following a TURP procedure. Other recognised side effects of endoscopic surgery include:

- Retrograde ejaculation (dry ejaculation)
- Erectile dysfunction (impotence)
- Urethral strictures (narrowing of the urethra) or scarring
- Bleeding (occasionally requiring a blood transfusion)
- Urinary infection (UTI)
- Surgery will also involve a hospital stay of several days (usually 3 days after TURP) and it is often 6 weeks before patients can return to normal activities and regular exercise.

Ask your urologist for suggestions of reliable online sources if you would like more details on any of the treatments mentioned above.

• The Aquablation procedure.

# What is the Aquablation procedure?

This is a minimally invasive treatment option that combines the traditional surgical techniques of transurethral resection of the prostate (TURP) with non-thermal waterjet tissue ablation (a heat-free waterjet to remove prostate tissue). Most patients undergoing Aquablation do not require medication following treatment, although some may still require bladder medications.

Most patients stay overnight in the hospital for 1-2 nights after Aquablation and can resume normal, non-strenuous activities within a week or two. A urinary catheter may be needed for 24-72 hours following the procedure.

#### What are the benefits of Aquablation treatment?

- Rapid urine flow improvement
- Quicker return to normal activities compared to TURP
- Less than 1% reported cases of erectile dysfunction
- Greater than 90% chance of maintaining ejaculatory function
- Short catheterisation time (to be determined at the time of surgery)
- Long-lasting symptom relief with minimal to no sexual side effects

### What are the risks of the Aquablation procedure?

All surgical treatments have inherent and associated side effects. The most common side effects are mild and temporary and may include pain or difficulty when urinating, discomfort in the pelvis, blood in the urine, inability to empty the bladder or a frequent and/or urgent need to urinate, and bladder or urinary tract infection. A minority of patients may experience more severe pain on passing urine in addition to more prolonged urgency and frequency which may last up to 6 weeks. It is rare for symptoms to last longer than this.

Other risks include ejaculatory dysfunction and a low risk of injury to the urethra (water pipe) or rectum (back passage), where the medical equipment was used to gain access to the prostate during treatment. For more information about potential side effects and risks associated with Aquablation for BPH treatment, speak with your urologist.

#### What happens next?

If, after reading the various options, you wish to go ahead with Aquablation, you will be sent a letter giving you the date and time of your procedure, and also for a pre-operative assessment. If you have not already done a urine flow test, this will be performed as well as completing some questionnaires. If you are on blood thinners, you may be asked to stop taking them for a period prior to your treatment but this will be advised at your pre-op assessment. You will be sent fasting instructions on when to stop eating and drinking, which you must follow.

#### What happens on the day?

Even though the procedure does not take that long, you will probably be at the hospital some time before and after the procedure. You will have a urinary catheter placed after your procedure for your safety and comfort, and your urologist will decide when this can be removed. Antibiotics will be given directly into your vein in theatre, to minimise the risk of urinary tract infection and you may be given a course of antibiotics to take after the operation. You will be advised whether to continue to take prostate medication after the operation before you leave the hospital.

#### 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. If everything goes smoothly, you will be discharged home within 48 hours of your procedure. Your urologists will then arrange follow-up back in the outpatient clinic.

#### Aftercare and recovery

It is normal to have some mild pain or discomfort after the procedure and we advise you to take regular painkillers such as paracetamol, following the dosage instructions, to help keep it under control. You may also want to consider laxatives if you are prone to constipation to avoid straining. You may experience some difficulty initially in passing urine and although this will normally correct itself. If you are concerned about not being able to pass urine (retention) you should contact the hospital (see below).

Within a few days you will be able to resume normal activities and should notice improvements in urine flow within the first fortnight, although it may be three months before you see the full benefit. Regular exercise is recommended but should be introduced gradually. Blood and blood clots, including small amounts of ablated tissue, may be visible in your urine and ejaculation fluid for a few weeks. During the first few weeks, urinary frequency and urgency may continue to be an issue. If this is the case, please discuss it with your doctor. Return to work as soon as you feel comfortable, depending on your job.

#### **Resuming sexual activity**

We recommend you avoid ejaculation for 6 weeks following the procedure.

#### Who to contact after surgery if you have concerns

- Non urgent issues: During office hours and within 72 hours of discharge, contact the Berkshire Independent Hospital ward on 0118 902 8000 or your GP for advice. If after 72 hours, during office hours contact your GP or the Urology Department at the Royal Berkshire Hospital (0118 322 5111) for advice. If you are a private patient, contact The Urology Partnership on 0118 920 7040 or email your urology consultant / secretary.
- **Urgent issues:** Within 72 hours of discharge, contact the Berkshire Independent Hospital ward on 0118 902 8000.

After 72 hours, contact your GP, out of hours GP, NHS 111 or attend your local A&E. If you are a private patient, you can also contact The Urology Partnership on 0118 920 7040 or your urologist.

#### References

- 1. https://www.nice.org.uk/advice/mib315/chapter/The-technology
- 2. Gilling P. et al. Three-year outcomes after Aquablation® therapy compared to TURP: results from a blinded randomized trial. Can J Urol. 2020 Feb;27(1):10072-10079.
- 3. Gilling PJ. Et al. Five-year outcomes for Aquablation therapy compared to TURP: results from a

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double-blind, randomized trial in men with LUTS due to BPH. Can J Urol. 2022 Feb;29(1):10960-10968. PMID: 35150215.

- 4. Desai M, et al. Aquablation for benign prostatic hyperplasia in large prostates (80-150 cc): 2year results. Canadian Journal of Urology. 27(2):10147-10153. Apr 2020.
- 5. Bach T. et al. First Multi-Center All-Comers Study for the Aquablation Procedure. J Clin Med. 2020 Feb;9(2): 603.

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# Please ask if you need this information in another language or format.

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