AQUABLATION OF THE PROSTATE GLAND

Information about your procedure from
The British Association of Urological Surgeons (BAUS)

This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.

To view this leaflet online, scan the QR code (right) or type the shortened URL below it into your browser.

http://rebrand.ly/rum1alh

KEY POINTS

- Aquablation involves robotic-guided high-pressure water jet destruction of obstructing prostatic tissue
- A channel will be created through your prostate to improve flow
- The procedure is designed to improve your urinary symptoms without the use of heat
- Sexual side-effects such as erectile dysfunction (impotence) are very rare (less than 1%) whilst retrograde (dry) ejaculation is very uncommon (10%)
- The risk of incontinence is very low (1%)
- The procedure is performed as a day case or with an overnight stay
- You will have a catheter inserted at the end of the procedure. You may go home with a catheter for a few days, or have it removed whilst you are in hospital
- In a small number of men who have this surgery, further treatment may be needed at a later stage

What does this procedure involve?

Your prostate gland sits around your urethra (waterpipe) as it leaves the bladder and, when it enlarges, it can block the flow of urine.

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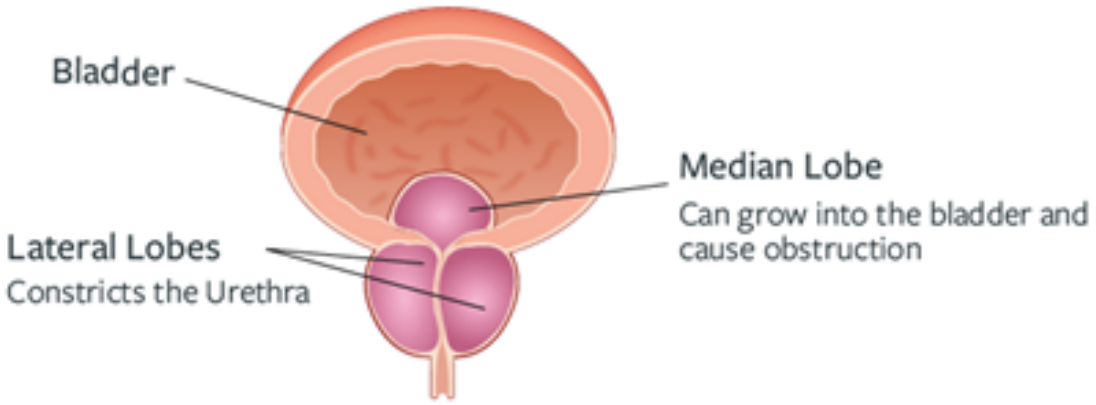
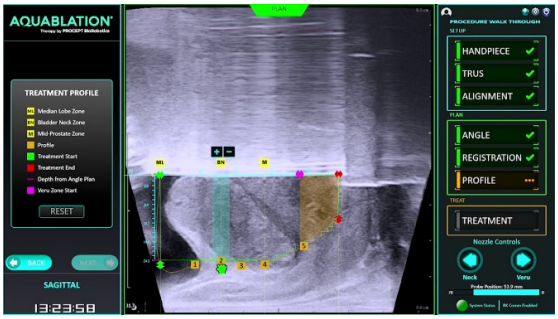
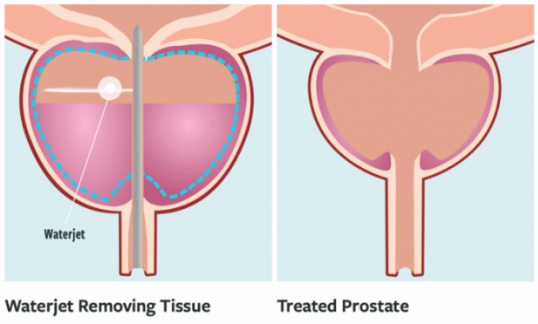


The aquablation procedure uses robotic technology to guide a high-pressure water jet to ablate (destroy) obstructing prostate tissue, guided by 3D ultrasound mapping (see below).





Waterjet Removing Tissue Treated Prostate

After resection is completed, we stop any bleeding using focal thermal energy (electrical coagulation). Following the procedure, we usually insert a temporary catheter. You may be discharged with a catheter, or you may stay overnight and have the catheter removed before leaving hospital, depending on local practice.

The main benefits of this procedure, when compared with other surgical treatments for prostate enlargement, are:

- predictable and reliable length of procedure, irrespective of prostate volume
- a short stay in hospital (sometimes as a day case) & an earlier return to normal activities;
- a minimally-invasive, robot-guided procedure; and
- sexual side-effects such as retrograde (dry) ejaculation, erectile dysfunction (impotence) and incontinence are rare.

Your urologist can advise you whether this procedure is suitable for you.

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What are the alternatives?

- **Conservative treatment** – restricting your fluid or caffeine intake to improve your urinary symptoms and help you avoid surgery
- **Drug treatment** – using either finasteride (to shrink your prostate) or drugs which relax the muscles in the prostate (e.g. tamsulosin) to improve urine flow
- **Other surgical procedures** – including transurethral resection of the prostate, holmium laser enucleation of the prostate (HoLEP), green-light laser prostatectomy (GLLP), the Urolift™ procedure & Rezūm steam ablation. Occasionally, an open or keyhole (± robotic assisted) procedure may be offered to you. Your Consultant Urologist will be able to discuss these alternative procedures with you.
- **Prostate artery embolisation (PAE)** – a technique where an expert radiologist (X-ray doctor) blocks off the arteries to your prostate gland, causing it to shrink over time

What happens on the day of the procedure?

Your urologist (or a member of their team) will briefly review your history and medications, and will discuss the surgery again with you to confirm your consent.

An anaesthetist will see you to discuss the general anaesthetic. The anaesthetist will also discuss pain relief after the procedure with you.

We may provide you with a pair of TED stockings to wear on the day of your procedure.

Details of the procedure

- we normally use a full general anaesthetic and you will be asleep throughout the procedure
- we usually give you an injection of antibiotics before the procedure, after you have been checked for any allergies
- once you are asleep, we insert an ultrasound probe into your rectum (bottom)
- we put a telescope device into your bladder through your urethra (waterpipe)
- we create an ultrasound map of the area to be ablated by the waterjet
- the waterjet is controlled by the robot, and at least two ablation cycles are completed (each lasting 2 - 5 minutes)
- on average, the procedure takes 40 – 60 minutes to complete

Are there any after-effects?

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon's advice about the risks and their impact on you as an individual:

After-effect	Risk
Temporary burning & stinging when you pass urine (which may last up to 2 weeks)	 1 in 3 patients
Temporary bleeding in your urine (which may last for 4 weeks)	 1 in 4 patients
Temporary pain or discomfort in your pelvic area	 Between 1 in 5 & 1 in 6 patients
Treatment may not relieve your symptoms, so that you require further treatment within 5 years	 1 in 25 patients (4%)
Infection in your urine requiring treatment with antibiotics	 1 in 15 patients (6 to 7%)
Risk of retrograde (dry) ejaculation	 1 in 10 patients (10%)
Risk of incontinence of urine	 1 in 100 patients (1%)
Risk of bladder neck contracture or urethral stricture	 1 in 100 patients (1%)

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Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)		Between 1 in 50 & 1 in 250 patients (your anaesthetist can estimate your individual risk)

What is my risk of a hospital-acquired infection?

Your risk of getting an infection in hospital is between 4 & 6%; this includes getting *MRSA* or a *Clostridium difficile* bowel infection. Individual hospitals may have different rates, and the medical staff can tell you the risk for your hospital. You have a higher risk if you have had:

- long-term drainage tubes (e.g. catheters);
- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

What can I expect when I get home?

- If you are discharged with a catheter, we will show you how to manage it at home & will arrange for its removal
- you may see some blood in your urine for 3 to 4 weeks
- some men get a degree of pelvic discomfort for a few days which can be relieved by simple pain killers such as paracetamol
- you will be given advice about your recovery at home
- you will be given a copy of your discharge summary and a copy will also be sent to your GP
- most men can return to normal activities after a few weeks.

Sometimes, in the weeks after surgery, you may see debris or small pieces of tissue in the urine; this is quite normal. You should see maximum improvement in your symptoms 8 to 12 weeks after the procedure, although it can sometimes take as long as 6 months.

General information about surgical procedures

Before your procedure

Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (e.g. warfarin, aspirin, clopidogrel, rivaroxaban, dabigatran);

- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

Questions you may wish to ask
If you wish to learn more about what will happen, you can find a list of suggested questions called "Having An Operation" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home
We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.

We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

Smoking and surgery
Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local NHS Smoking Help Online; or
- ring the Smoke-Free National Helpline on **0300 123 1044**.

Driving after surgery
It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to contact the DVLA if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

What should I do with this information?

Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for

your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

What sources have we used to prepare this leaflet?

This leaflet uses information from consensus panels and other evidence-based sources including:

- the Department of Health (England);
- the Cochrane Collaboration; and
- the National Institute for Health and Care Excellence (NICE).

It also follows style guidelines from:

- the Royal National Institute for Blind People (RNIB);
- the Information Standard;
- the Patient Information Forum; and
- the Plain English Campaign.

DISCLAIMER

Whilst we have made every effort to give accurate information, there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

PLEASE NOTE: the staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you have any questions, you should contact your Urologist, Specialist Nurse or GP in the first instance.

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