PROCEDURE

Transurethral resection of the prostate

Transurethral resection of the prostate removes prostate tissue through the urethra to improve urine flow.

PURPOSE
Relieve urinary blockage by removing obstructing prostate tissue

PROCEDURE TYPE
Therapeutic endoscopic surgery through the urethra

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
Spinal or general anaesthesia

HOW LONG IT TAKES
About 60 to 90 minutes

PREPARATION
Fasting and medication changes, especially blood thinners

RECOVERY
Usually overnight; no driving until safe and your team agrees

MAIN RISKS
Bleeding, infection, retrograde ejaculation, urinary control problems

RESULTS
Urine flow improves over weeks; laboratory tissue results follow

Overview

Transurethral resection of the prostate, or TURP, is an operation that removes part of the prostate gland. It is mainly used to treat urinary blockage caused by benign prostate enlargement. "Benign" means not cancer.

The prostate sits below the bladder and surrounds the urethra, the tube that carries urine out of the body. As the prostate enlarges, it can squeeze this tube and make it difficult to pass urine.

During TURP, a surgeon passes a narrow instrument called a resectoscope through the penis and along the urethra. No skin incision is needed. The surgeon removes small pieces of prostate tissue that are blocking urine flow.

TURP does not remove the entire prostate. It is not the same as an operation used to remove the prostate for cancer.

Why the procedure is performed

TURP may be offered when prostate enlargement is causing troublesome urinary problems and other treatments have not helped enough.

These problems can include a weak or interrupted urine stream, difficulty starting, incomplete bladder emptying, or needing to urinate frequently. TURP may also be considered if you cannot pass urine and need a catheter.

Other reasons include repeated urinary infections, bladder stones, repeated bleeding from the prostate, or damage to the bladder or kidneys related to poor urine drainage.

The aim is to create a wider channel through the prostate. This usually improves urine flow and helps the bladder empty more completely.

Who should and should not have it

TURP may be suitable if your symptoms have a meaningful effect on daily life, medicines have not worked or caused unwanted effects, or urinary blockage has led to complications.

It is not automatically the best option for everyone. Mild symptoms may be managed with monitoring, lifestyle changes, or medicines. Other procedures may be better depending on prostate size, prostate shape, other health conditions, and your priorities about recovery and sexual side effects.

TURP may be delayed if you have an untreated urinary infection. It may also be delayed if a heart, lung, bleeding, or other medical condition makes anaesthesia or surgery unsafe at that time.

Tell your team if you take medicines that reduce blood clotting. These include anticoagulants and antiplatelet medicines. Stopping them may be unsafe for some people, while continuing them may increase surgical bleeding. Your surgical and prescribing teams should make a plan together.

TURP commonly changes ejaculation. This matters if you want to have biological children. Discuss fertility and procedures that may be more likely to preserve ejaculation before consenting.

TURP is not a substitute for a full assessment when prostate cancer is suspected. Although

removed tissue is normally examined in a laboratory, TURP is designed to relieve blockage rather than treat most prostate cancers.

How to prepare

Follow the treating facility's own instructions, as these take priority over general information.

You may need urine tests, blood tests, an electrocardiogram to check your heart rhythm, or an anaesthetic assessment. Your team may also measure urine flow and how much urine remains in your bladder after you urinate.

Tell them about all prescription medicines, over-the-counter products, vitamins, and supplements you use. Do not stop a blood thinner like warfarin or apixaban unless the team responsible for your care has given you a specific plan.

You will usually be told when to stop eating and drinking before the operation. Following these fasting instructions reduces the risk of stomach contents entering your lungs during anaesthesia.

Arrange transport home. You will not be able to drive immediately after the operation. Plan for help with shopping, lifting, or other demanding tasks during early recovery.

What happens during the procedure

You will usually have either general anaesthesia, which means you are unconscious, or spinal anaesthesia, which numbs the lower half of your body. With spinal anaesthesia, you may also receive medicine to help you relax.

The surgeon passes the resectoscope through the urethra to the prostate. A small heated wire loop removes pieces of tissue and seals blood vessels. Fluid flows through the instrument so the surgeon can see the operating area.

The removed pieces are washed into the bladder and taken out. They are usually sent to a laboratory for examination.

A flexible tube called a urinary catheter is placed through the urethra into the bladder. It drains urine while swelling settles. Fluid may be run through the catheter to wash blood and small clots from the bladder.

Recovery and what to expect afterward

You may have burning, bladder spasms, or a strong urge to urinate. Pain is usually managed with medicines. Blood-tinged urine is expected at first and may come and go during healing.

You can normally drink and eat once you are awake and it is safe to do so. Fluids may help keep urine flowing, but follow any fluid limits given for heart or kidney conditions.

The catheter often stays in place until the urine is draining adequately and you can urinate after it is removed. Many people stay in hospital overnight, although a longer stay may be needed.

Walking gently helps recovery. Avoid heavy lifting, strenuous exercise, and sexual activity until your surgical team says they are safe. Straining can restart bleeding.

Do not drive while you have a catheter, while taking medicines that impair alertness, or until you can comfortably make an emergency stop. Follow your facility's driving instructions and any insurance requirements.

Time away from work is based on healing and the physical demands of your job. Desk work may be possible sooner than heavy manual work. Your team can provide a work plan based on how your recovery is progressing.

Urinary frequency and urgency can temporarily continue after surgery because the bladder and urethra need time to settle. Improvement may occur gradually over several weeks.

Risks and possible complications

Your surgeon should explain your individual risks before you consent. Important possible complications include:

Retrograde ejaculation is a common long-term effect. Semen travels backward into the bladder instead of coming out through the penis. It later leaves the body in urine. This is generally not harmful and does not prevent orgasm, but it can reduce fertility.

Rarely, irrigation fluid can be absorbed into the bloodstream and disturb the body's salt and fluid balance. This is called TUR syndrome. Modern equipment and monitoring have reduced this risk.

- Bleeding that may require bladder irrigation, another procedure, or a blood transfusion
- Urinary or bloodstream infection
- Temporary difficulty passing urine after catheter removal
- Ongoing urgency, leakage, or, less often, longer-term loss of urinary control
- Scar narrowing in the urethra or at the bladder opening

- Erectile difficulties, although erections are often unchanged
- A need for another prostate procedure if tissue regrows or narrowing develops

Results and follow up

You may notice a stronger stream once the catheter is removed, but swelling can affect early results. Urgency, frequent urination, or mild discomfort can take several weeks to improve.

The removed prostate tissue is examined in a laboratory. Your team will tell you when and how you will receive the result. If unexpected abnormal cells are found, they will explain whether further tests are needed.

Routine follow-up may review urine flow, bladder emptying, bleeding, infection, and urinary control. Keep this appointment even if recovery seems straightforward.

TURP often provides lasting relief, but it does not prevent all future urinary problems. Scar tissue, bladder conditions, or further prostate growth can sometimes cause symptoms later.

Alternatives

Monitoring may be reasonable when symptoms are mild and there are no complications. It avoids treatment side effects, but symptoms may continue or worsen.

Medicines can relax the prostate or gradually shrink it. They avoid an operation, but may need to be taken long term and can cause dizziness or sexual side effects. Shrinking medicines can take months to have their full effect.

A catheter can drain the bladder when surgery is unsuitable or needs to be delayed. It provides immediate drainage but can be uncomfortable and may increase infection or blockage risks.

Prostatic urethral lift and water-vapour treatment use implants or heat to open the urine channel. Recovery may be quicker and ejaculation may be better preserved, but symptom improvement may be less than with tissue-removing surgery, and repeat treatment can be needed.

Laser procedures, including holmium laser enucleation and laser vaporisation, remove or destroy obstructing tissue with less bleeding in some situations. Availability and results are influenced by prostate size and the surgeon's experience.

Aquablation removes tissue using a controlled water jet. It may reduce some sexual side effects, but it requires anaesthesia and is not available everywhere.

A simple prostatectomy removes the inner obstructing part of a very large prostate through

abdominal keyhole or open surgery. It can treat more tissue but is more invasive and usually requires a longer recovery.

When to call your healthcare team

For routine questions, contact your team if burning, urgency, leakage, or difficulty urinating is not improving as expected. Also call if blood in the urine repeatedly returns after activity or you are unsure when to restart medicines.

Seek prompt medical advice if you develop a fever, worsening pain, cloudy or foul-smelling urine, or increasing bleeding.

Get urgent help if you cannot pass urine, the catheter stops draining with increasing bladder pain, or you pass large clots or persistent bright-red blood.

Call emergency services for severe bleeding with weakness or fainting, chest pain, severe shortness of breath, or sudden confusion.

Common questions

Will I be asleep?

You may have general anaesthesia and be asleep. Another option is spinal anaesthesia, which numbs you from the waist down. You may receive sedation so you feel relaxed or drowsy.

Can I drive home?

No. Arrange for someone to take you home. Do not drive again until you are no longer affected by medicines or a catheter and can safely perform an emergency stop.

How painful is TURP?

You should not feel the operation because of the anaesthetic. Afterward, burning when urinating and bladder spasms are more common than severe surgical pain.

When will I know if it worked?

Urine flow may improve soon after catheter removal. Frequency and urgency can take several weeks to settle as swelling decreases and the bladder adjusts.

Will TURP affect sex?

Erections and orgasm may remain unchanged, but semen commonly enters the bladder instead of coming out through the penis. Ask about alternatives before surgery if ejaculation or fertility is important to you.

When will I get the tissue results?

Laboratory timing differs between facilities. Your team should tell you when results are expected and whether they will be discussed by phone, letter, or at follow-up.

Sources

- NHS. Transurethral resection of the prostate
- National Institute of Diabetes and Digestive and Kidney Diseases. Treatment for benign prostatic hyperplasia
- European Association of Urology. Guidelines on the management of non-neurogenic male lower urinary tract symptoms
- American Urological Association. Benign prostatic hyperplasia guideline -guideline)
- British Association of Urological Surgeons. Transurethral resection of the prostate patient information