Transurethral resection of the prostate (TURP) - for benign prostate disease

Summary

Transurethral resection of the prostate (TURP) is the surgical removal of part of the prostate gland. It is one option available to relieve the symptoms of an enlarged prostate or other benign (non-cancerous) prostate disease. It is by far the most common of the surgical procedures used for benign prostate disease.

Prostate gland
The prostate is a small gland that is part of the male reproductive system. It helps with making semen. The urethra is the tube that goes from the bladder, through the prostate gland, to the outside of the body. It is used to pass urine and seminal fluid.

Prostate problems
The three main problems that occur in the prostate include:

- inflammation (prostatitis)
- non-cancerous enlargement of the middle part of the prostate. This is also called benign prostatic hyperplasia (BPH)
- cancer of the prostate. This occurs mostly at the back of the prostate, but sometimes also occurs in the area where the prostate is enlarged due to BPH.

Prostate size and blockage of the urethra
If the inner part of the prostate gland obstructs the urethra during urination, this will irritate the bladder and cause urinary symptoms.

Urinary symptoms may include:

- problems with starting urination
- reduced flow
- frequent urination, particularly at night
- urgency and possible urgency incontinence
- passing drops of urine involuntarily after you think you've finished
- blood in the urine – although this can never be assumed to be due to the prostate until other causes have been excluded.

The actual size of the prostate does not appear to determine whether or not there is a blockage. Some men with large prostates never develop obstruction, but some men with small prostates can have severe bladder obstruction, which causes difficulty with urinating.

Around one in three Victorian men over the age of 50 years have some urinary symptoms. In most cases, these symptoms are due to a blockage caused by an enlarged prostate, but they may be due to other causes.

TURP procedure
TURP is sometimes referred to as a 're-bore'. It involves inserting a slender instrument through the urethra into the bladder. Only the middle part of the prostate is removed to allow you to pass urine more easily. TURP is used most often for non-cancerous blockage, but may also be used in some cases of prostate cancer. This is the most...
common form of surgery (around 95 per cent of surgical procedures). The average hospital stay is three to four days.

**Side effects of TURP**
While surgery can improve symptoms dramatically, TURP can have significant unwanted side effects. You should discuss the pros and cons of both medical management and surgery with your doctor before you make a decision.

**Common side effects of TURP**
Common side effects after surgery include:
- Bleeding after the operation – this usually reduces over time and should stop after four weeks.
- Retrograde ejaculation – most men are able to have erections and orgasms after surgery to treat an enlarged prostate. However, they may not ejaculate because the bladder neck is removed along with prostatic tissue. This causes the ejaculate to collect with urine and pass out in the next urination.

**Less common side effects of TURP**
Less common unwanted effects of surgery include:
- Urinary symptoms do not change – sometimes surgery does not cure your urinary problems. Even though the blockage has been cleared, the bladder irritability may continue and you may still have symptoms such as being unable to empty your bladder completely and nocturia (passing urine more than twice during the night).
- Erectile dysfunction (impotence) – some men are unable to get or maintain an erection sufficient for sexual intercourse after surgery. This is more of a problem for men who had erectile difficulties before their operation. This problem may be treated by medication.
- Urethral strictures – when scarring occurs in and around the urinary tract, it can cause further blockage to urine flow. Strictures may need to be dilated or need further surgery.
- Urinary incontinence – sometimes surgery results in being unable to hold or control the flow of urine. This may be due to continuing bladder problems or, less often, to sphincter muscle damage.
- Infertility – retrograde ejaculation is not harmful, but it can result in infertility. It causes the seminal fluid to collect with the urine and it doesn’t come out as ejaculate. This makes ‘natural’ insemination impossible. However, in vitro fertilisation (IVF) may be used to achieve a pregnancy. The sperm can be removed from the urine and injected into the woman’s harvested eggs.

**Other surgical procedures for prostate disease**
Alternative surgical procedures to TURP include:
- open enucleative prostatectomy – this involves making a cut in the abdomen to remove a very enlarged prostate. This is the least common form of surgery. The average hospital stay is seven to 10 days
- laser TURP – a laser is used to remove prostate tissue from the middle part of the prostate, which has the advantage of less bleeding and therefore safer for people on anti-coagulation therapy for other problems, including coronary stents, heart valve or vascular disease
- transurethral incision of the prostate (TUIP) – is similar to TURP except that no prostate tissue is taken out. One to three cuts are made in the prostate near the bladder neck to release the ‘ring’ of enlarged tissue and make a larger opening around the urinary tract
- UroLift® – this technique is useful for men for whom medication has not been successful but their prostates are not so enlarged that they need a TURP. It involves the transurethral insertion of staples to separate the lobes of the prostate. It has minimal side effects and preserves ejaculatory and erectile function.

**Immediately after a prostatectomy**
After the operation, you can expect that:
- Nurses will monitor your vital signs.
- You may be given oxygen for up to 24 hours following surgery.

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• You will probably be given antibiotics to prevent infection.
• For a day or so, you will have a catheter in your urethra and bladder with a continuous wash-out. This is to prevent blood building up and clotting, which could cause a blockage.
• If you had an open prostatectomy, your wound will be dressed and you will have a tube draining your abdomen. The tube will be removed after several days.
• Pain will be managed with injections, tablets or both. Pain is rarely a significant problem following TURP.

Complications of prostatectomy
Possible complications of surgery include:

• reaction to the anaesthetic
• bleeding
• infection.

Self-care at home after a prostatectomy
Be guided by your doctor, but general suggestions include:

• Make sure you get plenty of rest.
• Drink plenty of fluids following a TURP. Your urine may be tinged with blood for about one month or so. Remember that while it might look like a lot of blood, even a little blood can change the colour of your urine quite a lot.
• Do not restart any medication that may affect your tendency to bleed until your doctor says you can. In particular, this includes non-steroidal anti-inflammatory drugs and anti-clotting medication.
• Avoid straining when passing stools (poo).
• Avoid lifting or digging for four to six weeks.
• You can drive a car and go for a walk after the first week.
• Be advised by your doctor about when you can go back to work.
• Avoid exercise, strenuous activity and heavy lifting for up to six weeks.
• If you have gone home with the urinary catheter in place, make sure you clean the equipment as shown by hospital staff, to reduce the risk of infection.
• If you have had an open prostatectomy, you will need to see your doctor after seven to 10 days to have the stitches or staples removed.
• Be alert for any unusual symptoms such as redness, swelling (including swelling of your testicles) or discharge, fever, heavy bleeding or the inability to pass urine. If you experience any of these symptoms, see your doctor immediately or visit your nearest hospital emergency department.

Other forms of treatment for benign prostate disease
Other forms of treatment may include:

• Monitor symptoms – the condition is monitored closely. Treatment only begins once the condition has progressed and is causing problems.
• Medical treatment – symptoms of benign enlargement can be treated by drugs that relax the muscles around the bladder or that shrink the prostate and delay the need for surgery.

Where to get help

• Your doctor
• Urologist
• The Cancer Council Information and Support Service Tel. 13 11 20

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Things to remember

- The prostate is a small gland of the male reproductive system that contributes to producing semen.
- Trans-urethral resection of the prostate, the most common type of surgery for benign prostate disease, is surgical removal of the prostate through the urethra. Side effects of surgery include urinary incontinence, erectile dysfunction (impotence) and infertility.
- Open prostatectomy is surgical removal of the prostate through an abdominal incision. It is only done when the prostate is very large and too big for TURP or laser removal.