**Trans Urethral Resection of the Prostate (TURP)**

**Introduction**

This information leaflet is intended for patients undergoing Trans Urethral Resection of the Prostate (TURP).

Over 45,000 TURP operations are performed annually in the UK, 400 to 500 of which are performed at Gloucestershire Hospitals.

**Definition**

The prostate is a gland that only men have, which sits around the urethra (water pipe) just beneath the bladder. It helps to lubricate the ejaculate (semen).

TURP is an operation performed on patients who have developed an enlarged prostate. As the prostate enlarges, it squashes the urethra (a bit like putting your foot on a hosepipe) and this prevents the bladder from emptying properly. If this is left untreated the bladder can potentially continue to fill with urine and eventually the back pressure can cause damage to the kidneys.

Although this problem can occur in men aged below 60 years, it becomes more common in men aged over 60. Approximately half of men aged around 60 will have an enlargement of the prostate. This number rises to approximately 5 out of 6 men aged 80 and over.

Enlargement of the prostate is benign (not cancerous) in approximately 85% of cases. We will therefore analyse all tissue removed to exclude cancer.
The procedure TURP is the removal or incision (cutting) of the obstructing, central part of the prostate gland using heat diathermy down a telescope inserted via the urethra under spinal or general anaesthetic. The operation usually takes 30 to 60 minutes depending on the size of the prostate. At the end of the procedure, a catheter is inserted to allow urine drainage and the use of irrigation to wash out the bladder if the urine is blood stained. This is usually removed on the second day after the operation.

There are no abdominal incisions made during the procedure therefore you will not have any external scars.

The prostate can re-grow. It is important to note that if this happens, you may need to undergo the operation again. Around 10% of patients usually require additional surgery, approximately eight to twelve years later.

Benefits
The expected outcomes of this operation should be:

- An improvement in the flow of urine
- A reduction in the frequency and urgency of passing urine
- A reduction in the number of times you need to get up to pass urine at night
- The removal of a permanent indwelling urethral catheter (if one had been placed pre-operatively).

It is important to note that your symptoms may have taken years to develop and may therefore take several months to settle down completely after the operation. The average length of stay for this procedure is three days.

Risks
Incontinence (leaking of urine)
Less than 1 in 100 men undergoing TURP experience continuing problems with incontinence after the operation. However, some men experience frequency, urgency and urge leakage following surgery. This is due to an irritable or unstable bladder muscle which is secondary to the blockage caused by the enlarged prostate. Bladder re-training maybe beneficial after the operation and there are community based continence services that your GP can refer you to, if this does become a problem. The majority of patients with an irritable bladder will find their symptoms improve considerably over the first three months after the operation but medication may help.
Impotence (inability to have an erection)
As few as 14 in 100 men undergoing TURP will experience problems achieving an erection after the operation. If you decide to have this operation and impotence becomes a problem afterwards, please either mention that at your follow-up appointment or see your GP. We do have experienced practitioners who deal with this problem and can offer advice and treatment where necessary.

Retrograde ejaculation (the ejaculate goes backwards into the bladder)
During this operation, the sphincter (valve) that stops the ejaculate going backwards into the bladder may be affected. This occurs in 70 in 100 of men undergoing TURP and is a permanent condition. During intercourse and climax, the majority of the ejaculate (semen) goes backwards into the bladder. It will remain in your bladder until you next pass water, when it will be passed out with your urine. This does not do you any harm, however, it can affect your enjoyment of sex and can feel rather odd. It can also have the effect of preventing you from fathering children, however it should not be used as a form of contraception, as there is always a risk of some of the ejaculate coming out in the usual way.

Bleeding
Most surgical operations carry a risk of bleeding. We will take a sample of your blood and save the specimen in order to be able to give you a blood transfusion if necessary, although the risk of this is low. 1 in 100 patients need to go back to theatre due to bleeding.

It is normal to see some blood in the urine for the first one to two days. Constipation can increase the risk of bleeding after TURP, as straining or hard stool can cause pressure on your prostate. We advise that you try to eat a high-fibre diet with plenty of fruit and vegetables, both before and after the operation.

You will also need to drink approximately two litres of fluid (ten cups per day) after the operation whilst in hospital and for about three to four weeks after you go home. This will ensure that any debris in your bladder is washed out and will also enable you to pass good volumes of urine.

Perforation
In rare cases, a hole may be made in the capsule of the prostate. If this occurs, urine could potentially leak in the pelvis and so a catheter is left inside until the hole has had time to heal. Please see section ‘after the operation’ for a full explanation.
**Infection**
Introducing anything into the bladder carries the risk of infection, no matter how sterile the procedure. Signs of infection are frequency, urgency and experiencing severe burning when passing urine. A raised temperature may also accompany these symptoms. You may feel the need to pass urine, even when there is no urine in your bladder. If infection occurs during your stay in hospital, you will be treated with antibiotics. If you experience all or some of these symptoms after discharge and they persist, please see your GP urgently to be assessed.

Please note that the first few times that you pass urine after the operation, you may find it quite sore and/or painful. Initially you will probably experience some frequency and urgency of passing urine and this may take several months to settle down completely.

**Practical guidance**

**Before the operation**
You will be assessed in the pre-admission clinic for your suitability to undergo the operation. You will be given instructions on diet and what to bring in with you. You should also try to arrange for an adult to be with you for the first 24 hours following discharge. If this is not possible, please ensure that the nursing staff are aware prior to the operation.

**On the day of your operation**
You will not be able to eat or drink for approximately six hours prior to your operation (this includes chewing gum). This is to ensure that we can safely administer an anaesthetic to you.

An anaesthetist will see you before your operation and assess you for your anaesthetic. There are generally two types of anaesthetic that are used for this operation: General anaesthetic and spinal anaesthetic. These will be discussed with you, and the anaesthetist will decide which one is safest for you, taking your medical history into consideration.

**After the operation**
During the operation, an intravenous drip will have been inserted into your arm in order to provide your body with fluids. You will also have a catheter which is a tube to drain your bladder. This is held in place by an internal balloon which prevents it from falling out. The day after your operation, you should be able to move around the ward with the catheter in.
Your urine may be quite bloody after the operation and this is quite normal. The prostate has thousands of tiny blood vessels supplying it. Although cauterization (sealing) of the blood vessels occurs during surgery as the prostate is cut away in order to stop the bleeding, it is impossible to seal all of these.

For the first 12 to 18 hours after the operation, the catheter will have irrigation fluid going into it in order to wash the bladder out and prevent blood clots blocking the exit of the bladder. When the urine starts to clear, the irrigation will be removed and the catheter is usually removed 18 to 24 hours later. You will then stay in hospital until we are sure that you are passing your urine with a reasonably good flow. Nursing staff on the ward will scan your bladder with an ultrasonic scanner (this is completely painless), in order to ensure that you are emptying it properly. 18% of patients will find their first trial without catheter is not a success. If this occurs, we will send you home with a catheter after teaching you how to look after it and we will arrange for this to be removed approximately two weeks later.

**At home**
On discharge from the hospital, you should try to arrange for an adult to be with you for the first 24 hours following your surgery. If this is not possible, please ensure that the nursing staff are aware of this.

**Bleeding**
Approximately two weeks after the operation, the internal scabs on the prostate come away and you may experience some bleeding. This may occur periodically for up to three months after the operation. However, if the bleeding becomes heavy and clotted, there may be a risk that a clot will block the exit of the bladder and you would not be able to pass urine. Please contact your GP if you are concerned.

**Driving**
Do not drive or do any heavy lifting for two weeks. If you do drive and have to brake suddenly, or you lift a heavy object, you may cause a bleed to the raw surface of the prostate and this may result in re-admission to hospital.

**Sex**
It is safe to have sex four weeks after your operation, although climax may feel different due to the retrograde ejaculation discussed earlier. Some men experience pain or discomfort on the first few occasions.
Time off work
We suggest that you should be off for two weeks. We will provide you with a sick certificate when required.

Alternative to TURP:

Alpha blockers and 5 alpha reductase inhibitors
These are tablets which help to relax the bladder neck muscle and reduce the size of the prostate gland by 20% to 30%. These can therefore enable some patients to pass urine more easily. Side effects include retrograde ejaculation in 7%, low blood pressure and difficulty achieving an erection.

Holmium Laser Enucleation of the Prostate (HoLEP)
This is an endoscopic procedure to remove prostatic tissue via a telescope in the urethra under general or spinal anaesthetic. The laser is used to remove the obstructing prostatic tissue which is made into smaller pieces in the bladder and removed via the telescope. A catheter is left in place at the end of the procedure. The procedure usually takes 45 to 90 minutes. The catheter is then removed the following morning. Two of our surgeons are able to offer this procedure at Cheltenham General Hospital.

Open Retropubic Prostatectomy
This is an open operation involving an abdominal incision, which is performed when a patient has a very large prostate. In these cases, a TURP is unlikely to be sufficient to improve symptoms. The enlarged prostate is removed, leaving the surrounding capsule in place. A catheter is placed and must remain for one to two weeks after surgery.

Contact information
If you have any further questions or problems following your operation, help or advice can be obtained from your GP or:

Cheltenham General Hospital
The advanced nurse practitioner for Urology:
Tel: 0300 422 5193
(Monday to Friday, 8:00am to 5:00pm)

Qualified nursing and medical staff on Bibury Ward
Tel: 0300 422 4108 (24 hours)
Tel: 0300 422 2353 (24 hours)