TURP (TRANURETHRAL RESECTION OF PROSTATE GLAND)

Introduction

Benign prostate enlargement is a common condition in older men that results in the following bladder emptying problems: hesitancy (waiting several minutes for the stream to start), straining (or pushing to get started), weak stream and incomplete emptying. With time, some men develop problems with bladder storage: nocturia (waking up to pass urine at night), frequency (going to pass urine within 2 hours after the last time) and urgency (inability to hang on when one feels the desire to pass urine).

These symptoms are common, but men usually regard mild changes as part of growing older. They seek treatment when the symptoms become bothersome, affect their usual activities and quality of life or out of concerns for prostate cancer.

Most doctors will do a PSA (blood test) and examine the prostate to determine if a biopsy is required for a diagnosis of prostate cancer. In most cases, the symptoms are due to benign enlargement, and will respond to medication. These medications include alpha blockers (Prazosin, Tamsulosin, Terazosin, Alfuzosin) which relax the prostate smooth muscle; or 5 alpha reductase inhibitors (Finasteride, Dutasteride) which deprive the prostate of hormonal stimulation, and cause the prostate to decrease in blood supply and size over 6-12 months. In combination, medications can reduce the risks of retention or surgery by 25%.

Surgery is indicated if the medication is ineffective, causes side-effects or patients do not want to take tablets for the rest of their lives. Other reasons to perform surgery are bleeding, recurrent urinary infections, bladder stones or retention (inability to pass urine, requiring a catheter).

What are the alternatives?

1. Conservative measures
    a) Keep the bowels regular and avoid constipation
    b) Avoid caffeinated drinks – Coke, tea, coffee
2. Alpha-blockers – Prazosin, Tamsulosin, Terazosin, Alfuzosin
3. 5ARIs – Finasteride, Dutasteride
4. Combination – Duodart (Tamsulosin/Dutasteride)
5. Herbal therapies – saw palmetto, epilobium
6. Surgery
    a) Transurethral resection of prostate (TURP)
    b) Bladder neck incision (BNI)
    c) Laser prostatectomy (using green light or Holmium laser)
    d) Open prostatectomy

What does the procedure involve?

The procedure is performed under spinal or general anaesthetic, and takes 1 hour. A telescope is inserted into the urethra, and the prostate tissue that is causing the blockage is removed using an electric current.

The tissue is sent off to the pathologist to see if there is any cancer. A catheter is placed, and connected to irrigation (bags of fluid run through to wash out any blood or clots). The irrigation is turned down if clear, and the catheter can be removed after 1-2 nights.

What are the risks of surgery?

All operations have potential complications. These are listed below.

Common (>10%)
Bleeding (transfusion is rare)
Loss of ejaculaton (at orgasm, semen enters the bladder instead of the urethra)
Infertility (loss of ejaculation does not guarantee safe contraception)

Occasional (2-10%)
Infection
Retention (failure to pass urine, requiring longer period of having a catheter)
Urgency (difficulty holding on)
Urinary incontinence (weeks to months)
Failure of symptoms (especially nocturia) to improve for weeks-months
Perforation of the capsule

Rare (2%)
Impotence
Bladder neck or urethral scarring, leading to obstruction
Long-term urinary incontinence (months to years)
Transurethral resection (TUR) syndrome – absorption of fluids resulting in low salt levels, causing restlessness, blur vision, heart failure and fits
Reactions to anaesthetic agents

What should I do before surgery?

You will need to fast (no food or fluids) for 6 hours before the procedure. Keep your bowels regular and avoid constipation, using apeurients before (and after) if needed.

What should I expect after surgery?

You will have observations in the recovery room for 1-2 hours before being discharged back to the ward. You can eat and drink as you wish, provided there is no nausea or vomiting. There will be a catheter in the penis, attached to bags of fluid and a drainage bag. This catheter stays in for 2-3 days, depending on the amount of bleeding and irrigation required. Once the urine colour becomes light, the catheter is removed and if you can pass urine without keeping more than 200 mls in the bladder, you can be discharged from hospital.

Avoid strenuous activity or heavy lifting for 2-4 weeks. Take Ural sachets every 4 hours to relieve any stinging or burning whilst passing urine. The urine may remain blood-stained with occasional small clots for 4 weeks. If you cannot pass urine, the catheter is reinserted, you will be taught how to empty it, and discharged with an appointment to come back to hospital in 1 week to have it removed.

If you feel unwell, feverish, have difficulty passing urine or develop persistent heavy bleeding, especially with large clots, please contact your surgeon, general practitioner or attend the nearest emergency department.