

TURP

Bladder outflow obstruction from benign prostate enlargement ("prostatism") is common in middle-aged and older men. It frequently causes bothersome urinary symptoms of poor flow, delay in starting voiding, feeling of incomplete emptying, or frequency, urgency and night-time voiding.

Left untreated, a third of patients worsen, a third remain stable, and a third may improve. A proportion of men develop complications of kidney dysfunction or chronic renal failure, recurrent urinary tract infections, bladder stones. A minority of patients block completely with painful acute urinary retention and require (usually) temporary catheterisation. Another group may have progressive urinary retention that is painless. These patients have lost detrusor function and may not be helped by TURP. Instead they may need to do intermittent self catheterisation.

Not every man will want treatment for "prostatism". In those who find the symptoms bothersome however, the options are medication or surgery. Surgery is significantly more effective than medication, 85% of patients having an excellent outcome and marked improvement in urinary symptoms long term. Complications of urinary retention, kidney failure, urinary tract infections or bladder stones in general cannot be managed with medications and require surgery or intermittent self catheterisation.

TURP is performed telescopically, shaving the overgrown central part of the prostate to relieve the obstruction. This is associated with less pain and superior recovery when compared to open surgical procedures, allowing earlier return to normal function and shorter hospital stay. TURP performed using bipolar energy, compared to traditional monopolar TURP, achieves better control of bleeding, better vision, shorter catheterisation time and shorter hospital stay, and avoids the surgical risks and "TURP-syndrome" associated with non-saline irrigation fluids. There have also been a number of innovative energies and devices developed to achieve prostate resection or prostate tissue ablation, directed at reducing hospital stay, in some circumstances achieving a local anaesthetic procedure, and reducing procedure-related risks. However, there is typically a trade-off between risk and benefit, with "milder" lower risk procedures having less benefit and less durability than TURP, and requiring re-treatment in a percentage of patients. Such novel energies and techniques include lasers (holmium, thulium, neodynium, greenlight), water vapour and aqua-ablation, prostate lift, prostate artery embolisation, and metallic stents. Many of these do not preclude subsequent TURP if required. The benefits of some of these novel treatments may be delayed post-procedure, potentially requiring more prolonged catheterisation.

WHAT TO DO BEFORE YOUR PROCEDURE:

- ensure laboratory tests are done > 48 hours prior to surgery, unless advised otherwise
- discontinue aspirin and other anticoagulants 1 week prior, other medications may also need to be stopped
- nothing to eat or drink from 6 hours prior to procedure see Admission Booklet regarding diet restrictions
- microlax enema morning of the procedure for afternoon procedures, evening prior for morning procedures
- you will be admitted to hospital on the day of surgery.
- you do not need to shave prior to surgery

WHAT HAPPENS AFTER YOUR PROCEDURE:

- day 1 2: urethral catheter will be removed and voiding assessed, before going home
- withhold aspirin and other anticoagulants for 1 week but reinstate other usual medications
- increase fluid intake to wash out the bladder
- some blood in the urine commonly occurs intermittently over 10-14 days post-operation; this settles spontaneously and is rarely problematic
- you may not drive for 24 hours post procedure and see Admission Booklet regarding further restrictions following general anaesthetic
- avoid heavy lifting for 4 weeks; thereafter resume normal activity including sexual intercourse



WHAT CAN GO WRONG:

Although most cases proceed without particular difficulty and have excellent outcomes, surgical complications occur overall in 5% of patients. The list below details complications recognised as common or serious, but this does not include the rare and extraordinary.

- < 5% of patients are unable to void initially and require re-catheterisation for 1-2 weeks.
- Following removal of the catheter, most patients experience minor burning with voiding, frequency, urgency and night-time voiding. Some patients have urge urinary incontinence. These settle rapidly and can be improved by pelvic floor exercises.
 Many patients will wear a pad for a few days to protect their clothing.
- Some 30% of patients will have persisting bothersome bladder storage symptoms, the majority of whom improve over time, but the full benefit only being realised after 6-9 months.
- All patients experience reduced or dry ejaculation. Whilst this results in infertility, it is not a
 reliable means of contraception. This is an irreversible side effect of the surgery.
- Erectile function is not affected overall. Studies show as many patients report improved erections as report worsened erectile function. (Similar changes in erectile function are seen following certain orthopaedic procedures, remote from the penis and prostate). Patients should resume normal sexual activity, confident that it is safe to do so, 4 weeks after surgery, accepting that the reduced ejaculation may change the sensation of orgasm.
- Benign prostate enlargement is unrelated to prostate cancer. TURP removes only the central
 portion of the prostate and does not protect against future development of cancer in the prostate
 remnant.
- Early complications
 Bleeding requiring blood transfusion in < 1%</p>
 Urinary tract infection may require antibiotic treatment <3%</p>
 Numbness or tingling in legs and perineum is usually temporary
- Risk of death may be estimated using the nzRISK https://nzrisk.com on-line pre-operative calculator. It has been developed and validated for patients in New Zealand over the age of 18, to help patients and doctors balance benefits and risks of treatment.
- Late complications
 Persisting lower urinary symptoms
 Significant and persisting urinary incontinence in 0.5%
 Recurrent bleeding from the prostate remnant < 1%</p>
 Prostate regrowth, urethral scarring and stricturing < 1%</p>