**Introduction:**

Radical prostatectomy is a common operation to treat prostate cancer and involves the surgical removal of the prostate gland. In most cases, nearby lymph nodes are also removed.

There are several methods by which to access the prostate. Open surgery, or radical retropubic prostatectomy, involves a vertical incision below the belly button. Laparoscopic radical prostatectomy involves placement of a camera through a small incision below the belly button to visualize the prostate and several 0.5-1cm incisions through which long, thin instruments are inserted. Robotic-assisted laparoscopic prostatectomy is similar to laparoscopic prostatectomy but utilizes a robot whose movements are controlled by the surgeon who operates from a separate console. In all cases, the entire prostate is removed and the bladder neck is sewn to the urethra. A catheter is left in the bladder to act as a scaffold while this new connection heals.

Patients typically stay in hospital for 1-2 nights. They go home with a catheter draining urine to a bag which is worn on the leg. The catheter is usually removed after 7-10 days. Postoperative pain is usually quite mild. Immediately following surgery, patients can ambulate, walk up and down stairs, and eat/drink normally, but should not drive until the catheter has been removed. Most patients with non-strenuous jobs can return to work after 6 weeks.

**Side effects and potential risks:**

Once the catheter is removed, most patients experience temporary urinary incontinence (involuntary loss of urine). Patients typically notice their bladder control improving over subsequent weeks or months. 1-2% of men report being bothered by long-term incontinence, while about 10% may experience occasional drips of urine with heavy lifting, cough, sneeze, etc., but do not require pads and do not find it overly bothersome. The majority of patients will no longer require incontinence pads after 3-6 months.

The nerves involved in erections travel along the side of the prostate. Erectile dysfunction is common following radical prostatectomy. Most men will lose their erections immediately after surgery. Erections can improve over the subsequent 2-3 years, although they may return much faster in some men, and do not return at all in others. The degree to which erections may return depends on several factors, including the patient's preoperative erectile function and general health, and whether a nerve-sparing procedure is performed. Most men experiencing short or long-term erectile dysfunction after surgery can regain erections with the help of pills, vacuum devices, penis injections (intracavernosal injections), or surgery (penis implants). After prostatectomy, men will no longer produce semen and will be infertile but will still experiencing the feeling of orgasm. Some men experience shortening of the penis after surgery which is thought to result from reduced blood flow.

Rare surgical complications include accumulation of urine, blood, or lymphatic fluid in the pelvis which is usually managed with a small drain. In some cases the urinary catheter may need to stay in longer than 7-10 days. Excessive scarring can form between the bladder and urethra (a bladder neck contracture) causing difficulty urinating and requiring additional surgery to rectify. Very rare but serious complications of any pelvic surgery include major bleeding, injury to adjacent organs such as bowel/rectum, and the development of blood clots in the leg or lung.

**Discharge instructions:**

Men are discharged, usually after 1-2 nights, with a catheter in the bladder. Some men will also go home with a drain to monitor for fluid accumulation. Prior to discharge, nurses will ensure you are able to care for the catheter (ie: empty the leg bag when it is full). You will be contacted by community nurses (ie: CCAC, or the LHIN) to assist with catheter care. You may be required to travel to one of the CCAC community centres for catheter removal; you should have somebody drive you, as the catheter can be distracting while driving.

You should avoid strenuous activity, heavy lifting, or abdominal straining for 6 weeks. Consider taking a stool softener such as Colace for 2 weeks after surgery to minimize straining with bowel movements. You may have blood in your urine; try to stay well-hydrated to prevent blood clots from forming which can block off the catheter and would require a visit to the emergency department for catheter flushing. It is very important that you **do not allow anybody other than a urologist to remove your catheter for any reason** **or to insert a new catheter for 6 weeks after surgery**.

You will be given a prescription painkiller, although many men will not require it. You will also be given a prescription for an antibiotic to prevent infection at the time of catheter removal.

If you were instructed to hold blood thinners for the procedure, you can resume these once your urine has been clear for 2 consecutive days.

You will be given an appointment to have your catheter removed, usually after 7-10 days. **Bring an incontinence brief/pull up to this appointment**. While most men will be incontinent and gradually regain continence, if you have any difficulty emptying your bladder you should notify your urologist and go to the Joseph Brant Hospital emergency department.

**Questions?:**

It is important that you are fully informed and have had all your questions answered prior to the procedure. If you have any questions or concerns at any time either before or after the procedure, please discuss with us.