ROBOTIC-ASSISTED LAPAROSCOPIC PROSTATECTOMY

Introduction

2000 men are diagnosed with prostate cancer every year in Western Australia. Robotic-assisted laparoscopic prostatectomy is performed to treat localised prostate cancer in men with a life expectancy of 10 years or more. The aim is to remove the cancer and prostate completely to achieve cure.

What does the procedure involve?

Six keyhole incisions (5-15 mm) are made to allow placement of ports. Ports allow fine instruments to be inserted into the abdomen. A surgical assistant and daVinci robotic arms control the instruments. The surgeon sits at a console in the same room and controls the robotic arms, which cannot work on its own. The prostate gland and two sacs behind the prostate (seminal vesicles) are removed. The vas deferens (tubes that carry sperm to the urethra) is cut. The nerves that control erections run on the capsule of the prostate. In low-intermediate risk cancer, these nerves can be preserved by gently lifting them off the capsule. In high-risk cancer, this increases the risk of leaving cancer behind and nerves are removed, usually resulting in permanent loss of erections. The bladder is stitched to the urethra, and a tube (indwelling catheter or IDC) is left in the urethra for 7 days whilst the tissues heal.

Video (3 mins) http://www.youtube.com/watch?v=AP4vMfw1S7U

The general anaesthetic and surgery takes approximately 3 hours.

What are the alternatives?

Active surveillance
Open radical prostatectomy
Laparoscopic radical prostatectomy
External beam radiotherapy +/- image-modulated
Low dose rate (seed) brachytherapy

What are the risks of surgery?

All operations have risks. These are explained below, with estimated likelihood of occurring and techniques used to prevent them.

Common (>10%)
Temporary difficulties with urinary control
Impairment of erections and impotence
Inability to ejaculate and infertility
Discovery that cancer cells have spread, requiring further treatment

Occasional (2-10%)
Bladder neck scarring or anastomotic leak, requiring further surgery
Long-term urinary incontinence, requiring pads or further surgery
Further treatment, including radiotherapy or hormone manipulation
Lymph collection in the pelvis, when lymph nodes have been removed

Mild constipation
Apparent shortening of the penis
Development of a hernia in the groin or wound sites

Rare (2%)
Anaesthetic or cardiorespiratory problems requiring intensive care
Chest infection, clots in the legs and lung, stroke, health attack, death
Blood loss requiring transfusion
Rectal injury, requiring temporary colostomy (<0.5%)
Blindness, in pre-existing undiagnosed and untreated glaucoma

What should I do before surgery?

- Start practising pelvic floor exercises and walking regularly
- If you are obese, losing weight makes surgery easier and improves cure rates
- If you smoke, giving up makes anaesthesia safer and reduces complication rates
- Use an enema to open your bowels in the morning prior to surgery
- Do not eat or drink for 6 hours before surgery

What should I expect after surgery?

Most patients spend 1-2 hours in the recovery bay after the operation, to ensure they are fully awake before returning to the ward. You will be given clear fluids to drink, and encouraged to sit up in bed. Ideally, you will be discharged the following morning after breakfast if you are mobilising independently and are able to care for your IDC/bags. The dressings can be gently pat dry after a shower and they will start peeling off after a few days. The stitches are dissolvable.

You will need comfortable loose clothing, and arrange for someone to stay at home with you for a few days.

Discharge information

Drink 2L of fluid each day and include high fibre food in your diet. Do not strain to use your bowels, and take aperients if necessary. Do not use suppositories or enemas. Use Panadeine as required every 4-6 hours for pain. Most patients require 2-4 weeks convalescence. Light walking is encouraged, but heavy lifting and strenuous activity should not be performed for 4 weeks.

After a week, your surgeon will see you to remove your catheter. You will need to bring some pads with you, as it is common to have temporary loss of control over voiding for the first 1-3 months. Start doing regular pelvic floor exercises after the catheter is removed. If you had a nerve-sparing operation, and wish to start penile rehabilitation, start taking regular Cialis. You can resume driving once you can do so safely; this is usually after 1-2 weeks.

Please contact your surgeon through the rooms or hospital if you develop excessive pain, bleeding, odour or discharge from your wounds; or if the catheter is falls out, drains poorly or becomes blocked.

The website of the Sexual Medicine Society of North America, Inc. offers some useful information on erectile dysfunction after radical prostatectomy.
http://www.sexhealthmatters.org/erectile-dysfunction/radical-prostatectomy-erectile-dysfunction