Robotic assisted (laparoscopic) radical prostatectomy (M6192)

A prostatectomy is an operation to remove localised prostate cancer (cancer that has not spread outside the prostate gland) and locally advanced prostate cancer (where the cancer has started to break out of the prostate, or has spread to the area just outside the prostate).

A ‘Radical’ prostatectomy is where the whole of your prostate, rather than just a part of it, is removed. The surgery also involves removing your prostate gland, seminal vesicles (glands that store semen) and possibly blood vessels, nerves and fat around the prostate. The urethra is cut during the operation and then re-attached to your bladder.

Laparoscopic surgery is better known as keyhole surgery. A laparoscopic prostatectomy is the same as an open prostatectomy, except that the surgery is carried out using 6 small incisions instead of one large incision.

Robotic-assisted surgery is keyhole surgery that uses robotic arms (the daVinci® robotic system) to help your surgeon during the operation. Your surgeon is in the same room, but away from you, and controls the robotic arms to perform the operation with more controlled and precise movements.

The daVinci® robotic system has been used extensively throughout the United States and Europe and is used for many different types of operations, including heart surgery.

Why this procedure
Robotic surgery results in:
Less blood loss, less pain after the operation and a shorter hospital stay. Most patients go home one or two nights after robotic-assisted surgery, compared to an average of three or four nights for traditional open surgery.
Smaller scars and a greater likelihood of sparing the nerves and blood vessels attached to the prostate gland. These nerves and blood vessels control erections and urinary continence (ability to control when you pass urine).

The operation needs specialised training, as the surgeon is unable to ‘feel’ your tissues or organs as in traditional open surgery. Although rare, it may be necessary to convert to traditional open surgery if there is a lot of bleeding or other issues during the procedure.
**What is the procedure**
After a general anaesthetic, 6 incisions are made in the abdomen. One is made just above your belly button, where a high magnification 3D camera is inserted giving your surgeon a highly detailed view of the procedure. The remaining keyholes allow access for the surgical instruments used during the procedure. Most of the incisions are 1cm in length but one is 3–5cm to allow specimens to be removed. Special plastic tubes (ports) are placed through each incision to help the laparoscopic instruments pass through easily.

One robotic arm holds the 3D camera, the other robotic arms can hold various instruments, which your surgeon will use to carry out the surgery. The instruments are smaller than those used for traditional open surgery.

**Before, during and after the procedure**
You will wake up with:
A catheter, this is a tube inserted into the bladder through your penis and is attached to a leg bag. This will collect your urine so you will not need to leave your bed to pass urine. This will be left in place until wound between your bladder and urethra is fully healed, usually up to 2 weeks. A drain, his is a plastic tube that comes out from one of the small keyhole incisions. It prevents blood and urine collecting inside your wounds after surgery. It is normally removed the morning after surgery.

Stitches/glue or staples closing your wounds. Some of these dissolve and do not need to be removed. Others will be removed when your catheter is removed.

A drip to prevent dehydration, you will be able to start drinking clear fluids when you come round from the anaesthetic. The drip is usually removed the day after your surgery.

You may have discomfort bending at the waist and your scrotum or penis may be tender and swollen. However, most men find they do not need strong pain relief after the operation.

Your penis may appear shorter following surgery because the urethra will be shorter once the prostate has been removed. The urethra is quite elastic and can be stretched out by exercising the penis with a vacuum device which will help restore the length.

Although you will have small wound sites, you should not forget that you have had major surgery. You will need time to recover before returning to your normal activities.