What is a laparoscopic ventral rectopexy?

Laparoscopic surgery is also known as 'keyhole' surgery because the operation is done through a series of small cuts (which are 1cm or less in size) rather than a big cut in the abdomen (tummy). The operation is performed whilst you are asleep. During the operation, the lowest part of the bowel (rectum) is released from the back wall of the vagina (in females) or the bladder and prostate (in males) and a mesh is fastened to the front of the rectum using stitches. The mesh (a sterile sheet of netting) may be biological (made from bodily tissue) or synthetic (made from non-natural materials). The mesh is then fixed with special tacks or stitches to the bone at the back of the pelvis known as the sacrum. This has the effect of pulling up the bowel and preventing it from prolapsing downwards (falling out of place).

When is laparoscopic ventral rectopexy performed?

One of the most common reasons for doing the operation is for patients with 'external rectal prolapse' (bowel coming out through the anus). A newer reason for the surgery is "internal prolapse' or "intussusception". This is when the rectum prolapses internally in the rectum, without coming out of the anus. This may cause 'obstructed defaection syndrome' (ODS).

Patient who have ODS commonly have a sensation of a blockage in the bowel making it difficult to pass a motion. They often have a number of unsuccessful visits to the toilet and may feel the need to apply pressure with a finger or hand on the perineum (the area between the anus and genitals), or into the vagina. Internal rectal prolapse sometimes causes faecal incontinence (uncontrolled leakage of stool) A laparoscopic ventral rectopexy (LVR) may help these patients.

What other tests are necessary before the operation?

We will need to see you in clinic to assess your symptoms and to perform an examination. Most patients undergoing this operation will have an endoscopic (telescopic) test on the bowel. We may also perform studies on the anal sphincter to look at its structure and function (anorectal physiology and ultrasound). Other tests such as transit studies and a proctogram may also be performed. These tests are x-ray studies that look at how well your large bowel works and how well supported your pelvic organs are during the process of emptying your bowels.

What does the operation involve?

The operation is performed under general anaesthetic by keyhole surgery and takes between $1\frac{1}{2}$ and $2\frac{1}{2}$ hours. It usually involves a little cut just below the umbilicus (belly button) and 2 to 3 other small cuts on the tummy. The surgeon then operates down the front of the rectum, away from the nerves that supply the bowel and genitalia. The rectum is freed from the back wall of the vagina (the bladder and prostate in men) and a pocket is made for the lower end of the mesh (mesh is a synthetic material and comes in various different sizes). The mesh is then stitched to the front of the rectum. The top end of this piece of mesh is attached onto the sacrum or lower backbone. In some women, the vagina is also stitched to the mesh to prevent an actual or future vaginal prolapse. This operation pulls the bowel up out of the pelvis, restoring it to its normal anatomical position and prevents it re-telescoping (an internal prolapse) down. The position of the lower end of the mesh between rectum and vagina supports the rectovaginal septum which is a form of connective tissue that normally acts as a scaffold to the rectum. This corrects any rectocele (bulge from the rectum into the vagina) and enterocele (small bowel dropping into the pelvis between vagina and rectum).

What is the recovery like after surgery?

Typically, patients will wake up from the operation with a catheter (tube) in their bladder and a drip in their arm. Your anaesthetist will discuss pain control with you before the operation. On the first morning after surgery, your catheter will come out and your drip will usually come down. You will be able to eat and drink. Patients usually stay in hospital for one night after surgery. We do not usually wait for you to have your bowels open after the surgery before you go home. You will be discharged with a two week course of laxatives (most commonly used is Movicol). It is important you do not get constipated in the first few weeks after surgery as this causes pain. It is extremely important that you do not strain, especially when trying to have a bowel motion after your operation.

Movicol can be used up to six weeks after surgery if you find it helpful. You may be fit to drive after 2 weeks and return to work after 2-4 weeks but should not do any lifting for at least 6 weeks.

What are the results like from surgery?

For patients with external prolapse, the operation has a very low rate of recurrence (i.e. the prolapse coming back). Suitable patients with internal prolapse can also expect good results from surgery. For patients with ODS (see first paragraph of leaflet), around 4 out of 5 patients will have a significant improvement in their symptoms. A similar percentage of patients with incontinence from internal prolapse will have improved continence. We cannot predict which patients will not benefit from surgery. For these patients other additional measures can be helpful.

What are the risks and long term effects of surgery?

All surgery has risks. Whilst this is a relatively low risk operation because no bowel is removed, there are risks that you MUST be aware of if you decide to go ahead with surgery. These risks can be divided into overall failure of the procedure and the specific risk of complications.

Failure

- Operation makes no difference to symptoms (about 1 in 5 or 20%)
- Prolapse recurs (about 1 in 5 or 20%)
- Constipation gets worse not better (very uncommon)
- Bowel leakage (incontinence) gets worse not better. Occasionally new-onset incontinence can occur (uncommon).

Specific complications

- Bleeding (rarely significant)
- Vaginal or rectal injury requiring repair (rare)
- Infection (1-2%)
- Urinary retention (<10%) or worsening of urinary incontinence
- Mesh erosion (where the mesh wears away surrounding tissue) (2-3%)
- Sexual dysfunction in men (rare)
- Severe constipation (rare)
- Pain during sexual intercourse (uncommon and usually gets better with time)
- Infection of the sacrum (inflammation of one of the discs of the spine)(rare)

The risk of mesh infection or erosion is particularly important since this may not only lead to failure but also require complex surgery to resolve. In a few cases where someone has weak muscles around the back passage (anal sphincters) and a tendency to difficultly in controlling the bowels, or leakage, this may not improve immediately after the operation. It can take several months for things to settle down following surgery. If you have difficulties, you should talk to your doctor. Sometimes some exercises to strengthen your sphincters can help. A rectopexy operation does not guarantee that a rectal prolapse can never come back. The best way of helping to prevent this is to avoid heavy lifting and straining to open our bowels. Some people find that a rectopexy makes emptying the bowels more difficult.

Is anyone not suitable for surgery?

We have operated on elderly patients (over 85 years old) with external prolapse. Results have been favourable, though risk of developing a problem after surgery is higher in this age group. Occasionally it is impossible to perform the operation on patients who have had extensive previous abdominal surgery because of adhesions (scar tissue inside the abdomen). A previous appendix operation or hysterectomy is not usually a problem.

Is laparoscopic ventral mesh rectopexy better than other prolapse operations?

As this is a keyhole (laparoscopic) (keyhole) operation, you have smaller scars which is better cosmetically, and there is less pain. We use mesh as this seems to produce a longer lasting result. Crucially, we dissect out the rectum down its front ("ventral" or "anterior") side only; therefore, sparing the important pelvic nerves and this is why this operation does not cause constipation. Prolapse rarely comes back after laparoscopic rectopexy compared to operations from a perineal (through the anus) approach.

Is there an alternative to surgery?

Yes, you may be reviewed in the bowel function clinic by a nurse specialist or a specialist physiotherapist. Here you will be taught a combination of correct toileting techniques, pelvic floor exercises and how to empty your rectum to avoid discomfort or episodes of incontinence. You may also try rectal irrigation (flushing the lower bowel with a water/salt solution). If you have an external prolapse (where your bowel comes out of your anus fully), these techniques may not be suitable for you. Your surgeon will discuss any possible alternatives with you and if necessary.

Is the operation painful?

As with all operations, you should expect some discomfort. We will give you painkillers to take home with you. Please take them regularly, as this will keep the medicine at a constant level in your body and control your pain better. Always follow the instructions on the packet and never take more than the recommended dose. Your discomfort should settle down after a few weeks.

What happens after the operation?

After the operation, you will normally have a urinary catheter in place (a thin tube into your bladder) and a drip in your arm. You will be allowed to eat and drink as soon as you want to after the operation, and your drip will be removed once you are drinking enough. A nurse or nursing assistant will check your blood pressure on a regular basis, and you will be given pain relief to control any pain or discomfort, as well as laxatives to make sure you have a comfortable bowel motion. You will have compression stockings on your legs to prevent blood clots, and you will be encouraged to move around and get up and walk as soon as possible. The day after your operation your catheter will be removed. You should be able to go home one to three days after the operation.

What do I need to do after I go home?

You will need to continue on your pain relief and laxatives when you go home. Recovery will be different for every person, and can last anywhere from four to six weeks. You can resume normal activities as soon as you feel able to, but should avoid straining, lifting and strenuous exercise for at least six weeks. Sexual intercourse should be avoided for four weeks or until you feel comfortable. Returning to driving will depend on cover from your insurance company.

Will I have a follow-up appointment?

You will have a follow up appointment approximately six to eight weeks after your operation. This will be with your surgeon and you will have an abdominal and rectal examination to make sure everything is healing appropriately.

Dos & DON'Ts

Do get up and about both during your hospital stay and after going home

Don't lift anything heavier than a kettle for 6 weeks after surgery.

Do take regular laxatives (we usually recommend Movicol one sachet three times a day) to keep your motions soft

Don't get constipated or strain when on the toilet.

Don't ignore the urge to go to the toilet.

Do gradually reduce your laxatives in the six weeks

Don't be concerned if you do not open your bowel for 4-5 days after surgery or if your bowels are too loose after surgery. This is quite normal. Patients differ enormously in their need for laxatives but it is important that for six weeks, your bowels are on the loose side of normal.

Don't do running or gym work for six weeks after the surgery.

Do take exercise in the form of walking and swimming as soon as comfortable.

Don't have sexual intercourse for four weeks after the surgery.

Do drink plenty of fluids after surgery.

Don't drive for two weeks after surgery.

Do expect that your bowel function will bedifferent after surgery compared to before.

Don't suffer discomfort unnecessarily. You should take paracetamol regularly if needed. This will not cause constipation.

Further Information:

If your procedure is due to be performed using a mesh, a leaflet on what to expect if you have a mesh can be provided. For further information regarding prolapse, mesh and treatment for prolapse you can check out **The Pelvic Floor Society** Website

http://thepelvicfloorsociety.co.uk/pages.php?t=Patient-Information&s=Patient-Information&id=92