Laparoscopic (Robotic) Ventral Rectopexy

What is a laparoscopic ventral rectopexy?
The term “rectopexy” refers to an operation in which the rectum (the part of the bowel that is nearest the anus) is put back into its normal position in the body.

When is laparoscopic ventral rectopexy performed?
One of the most common reasons for carrying out this procedure is for patients with external rectal prolapse (bowel coming out through the anus). A newer reason for surgery is internal prolapse or “intussusception” when the rectum slides in on itself, without coming out of the anus. This may cause obstructed defecation syndrome (ODS) which causes a sensation of a blockage in the bowel, difficulty in passing a motion (having a bowel movement) and prolonged (often unsuccessful) visits to the toilet. It can also mean you need to apply pressure with a finger or hand on the perineum (skin between the vagina/testicles and the anus), in the vagina or the anus to empty your bowels. Internal rectal prolapse sometimes also causes fecal incontinence (when you are unable to hold a bowel movement in).

What other tests will I need before the operation?
We will need to see you in clinic to assess your symptoms and to perform an examination. Most patients who have this operation will have an endoscopic (telescope) test on the bowel. We will also look at how well the anal sphincter muscle works using ultrasound tests and special X-ray tests that show what happens to your bowel and rectum when you empty your bowels. All of these tests are necessary to check that laparoscopic ventral rectopexy is right for you.

What does the operation involve?
The operation is laparoscopic (keyhole surgery) and it involves a little cut just below the umbilicus (belly button) and several other small cuts on the abdomen. It is performed under general anesthetic (whilst you are asleep) and usually takes about one and a half hours.

This operation pulls the bowel up out of the pelvis and a mesh (sterile sheet of netting) is put in place to hold the bowel in its normal place in the abdomen. The mesh will also prevent it from prolapsing back down into the pelvis (intussusception).

What is the recovery like after surgery?
After the operation you will normally have a urinary catheter in place (a 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. Your anesthetist will talk about pain control with you before the operation but usually painkilling tablets and liquids will be enough. Usually, at 6am on the day after your operation your catheter will be removed and you can walk to the toilet to pass urine. You should be able to go home the day after the operation.

It is important to avoid constipation and straining in the first few weeks after surgery. We will give you laxatives to take for six weeks (usually Miralax and colace). You should be fit to drive after a week and return to work after 2-4 weeks. You should not lift anything heavier than a gallon of milk for at least 6 weeks as this can cause excess strain on the pelvic floor muscles and can delay healing; this includes supermarket shopping, housework, lifting children and sports.
What are the results like from surgery?
For patients with an external prolapse, the operation has a very low rate of recurrence (the prolapse coming back). In review of the literature from other centers, fewer than 2% recur. If the operation is performed due to an internal prolapse, obstructed defecation syndrome or fecal incontinence, about 4 out of 5 patients report a significant improvement in their symptoms. Some patients do not benefit from surgery, but there are additional treatments available which can help with the symptoms which we will discuss with you.

What are the risks of surgery?
This is relatively low risk surgery because no bowel is removed. With ventral rectopexy, the nerves are avoided and constipation only very rarely gets worse. Most patients with pre-existing constipation report that this improves after ventral rectopexy. Some patients with obstructed defecation and incontinence will not have a significant improvement in their symptoms, but are rarely worse after rectopexy. There are small risks of other problems including bleeding, infection, a hernia or bulge at one of the wounds or a problem with the mesh entering or piercing the bowel or vagina. This can happen months or even years after surgery. A problem with the mesh is very rare but if it occurs, further surgery may be needed to correct it. You will have the opportunity to discuss all the risks and benefits of the operation with your surgeon before signing the consent form.

Is anyone not suitable for surgery?
We have operated on elderly patients (over 85 years old) with external prolapse with good results, though these patients are at increased risk due to their age. Occasionally it is impossible to perform this operation on patients who have had extensive previous abdominal surgery because of adhesions (scar tissue in the abdomen), though a previous appendicectomy or hysterectomy is not normally a problem.

Is laparoscopic ventral mesh rectopexy better than other prolapse operations?
A laparoscopic (keyhole) procedure leaves less scarring and is less painful than open surgery (a cut down the middle of the tummy). We use mesh as this gives a longer lasting result than not using it. We carefully avoid damaging the important pelvic nerves which can cause constipation. Prolapse rarely comes back after laparoscopic surgery (2%) as opposed to operations through the perineum (20%). We collect, publish and present very detailed data on our surgical results and would be happy to discuss this in more detail with you when you come to clinic.
Figure 1: Start of a laparoscopic ventral mesh rectopexy. The surgeon retracts the uterus forwards and starts dissection on the front (ventral) part of the rectum, following the red line on this diagram and into the rectovaginal septum (the space between rectum and vagina).

Figure 2: The surgeon creates a pocket between the lower rectum and vagina and the mesh is sutured on to the front of the rectum, whilst the other end is fixed to the sacrum (backbone).

Figure 3: Diagram showing the rectum telescoping down into itself. In this diagram, this is an internal prolapse though in time, this may progress to an external prolapse.

Figure 4: Cross sectional view with the mesh supporting the rectovaginal septum. In this manner a rectocoele (bulge into the vagina) and enterocoele (small bowel coming into the pelvis) are corrected.
**DO's DON'T's**

Do get up and about both during your hospital stay and after going home.
Do take regular laxatives (we usually recommend Miralax or colace) to keep your motions soft.
Do gradually reduce your laxatives in the six weeks after surgery, if your bowels are too loose.
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.
Do take exercise in the form of walking and swimming as soon as comfortable.
Do drink plenty of fluids after surgery.
Do expect that your bowel function will be different after surgery compared to before.

Don’t lift anything heavier than a gallon of milk for six weeks after surgery.
Don’t get constipated or strain when on the toilet.
Don’t ignore the urge to go to the toilet.
Don’t be concerned if you do not open your bowel for 4-5 days after surgery. This is quite normal.
Don’t do running or gym work for six weeks after the surgery.
Don’t have sexual intercourse for four weeks after the surgery.
Don’t drive for two weeks after surgery.
Don’t suffer discomfort unnecessarily.
This will not cause constipation.
There is little “wrong” that you can do after a laparoscopic rectopexy. The most important things to avoid are constipation and heavy lifting.

Figure 5: Things to do and things to avoid after a laparoscopic ventral rectopexy.