Sacrocolpopexy for Vaginal Vault Prolapse

Patient Information Leaflet
**About this leaflet**

The information provided in this leaflet should be used as a guide. There may be some variation in how each gynaecologist performs the procedure, the care procedures on the ward immediately after your operation and the advice given to you when you get home. You should ask your gynaecologist about any concerns that you may have.

You should take your time to read this leaflet. A page is provided at the end of the leaflet for you to write down any questions you may have. It is your right to know about your planned operation/procedure, why it has been recommended, what the alternatives are and what the risks and benefits are. These should be covered in this leaflet. You may also wish to ask about your gynaecologist’s personal experience and results of treating your condition.

**Benefits and risks**

The success and the risks of most operations carried out to treat prolapse and incontinence have been poorly studied and so it is often not possible to define them clearly. In this leaflet risks may be referred to as common, rare etc. or an approximate level of risk may be given. Further information about risk is explained in a leaflet published by the Royal College of Obstetricians and Gynaecologists “Understanding how risk is discussed in healthcare”.


The following table is taken from that leaflet

<table>
<thead>
<tr>
<th>Risk table</th>
<th>Risk</th>
<th>Risk description</th>
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<tbody>
<tr>
<td>Very common</td>
<td>1 in 1 to 1 in 10</td>
<td>A person in family</td>
</tr>
<tr>
<td>Common</td>
<td>1 in 10 to 1 in 100</td>
<td>A person in street</td>
</tr>
<tr>
<td>Uncommon</td>
<td>1 in 100 to 1 in 1000</td>
<td>A person in village</td>
</tr>
<tr>
<td>Rare</td>
<td>1 in 1000 to 1 in 10000</td>
<td>A person in small town</td>
</tr>
<tr>
<td>Very rare</td>
<td>Less than 1 in 10000</td>
<td>A person in large town</td>
</tr>
</tbody>
</table>

**British Society of Urogynaecology (BSUG) database**

In order to better understand the success and risks of surgery for prolapse and incontinence the British Society of Urogynaecology has established a national database. All members of the society are asked to enter all procedures that they carry out onto the database and you may be asked to consent to this for your operation. The data collected are being used to develop an overall picture of what procedures are being performed throughout the United Kingdom together with complications and outcomes. Individual surgeons can also use it to evaluate their own practice.
What is a Sacrocolpopexy

A sacrocolpopexy is an operation to treat a prolapse of the vaginal vault (top of the vagina/front passage) in women who have had a hysterectomy (removal of womb) using a strip of synthetic mesh to lift the top of the vagina and hold it in place.

Diagram showing suspension of the vaginal vault (top of the vagina) using mesh following sacrocolpopexy

You should keep in mind that even though surgical treatment may repair your prolapse, it may or may not relieve all your symptoms.

The decision to offer you this procedure will only be made after a thorough discussion between you and your doctor. This decision usually depends on the nature and extent of your prolapse and as well as personal factors.

What condition does a sacrocolpopexy treat?

The operation is primarily intended to treat prolapse of the vault of the vagina, where the uterus (womb) used to be located before you had a hysterectomy. Prolapse of the vault is often accompanied by prolapse of the front wall and back wall of the vagina and the procedure can also help correct prolapse of the bladder or bowel to some extent.

A prolapse is a bulge within the vagina (front passage) caused by a weakness in the supporting tissues and muscles around the vagina so that one or more pelvic organs bulges downwards into or out of the vagina. Pelvic organs include the uterus, bladder and bowel.

A prolapse may arise in the front wall of vagina (anterior compartment / cystocele), back wall of the vagina (posterior compartment / rectoenterocele /
rectocoele), the uterus or the vault of the vagina after hysterectomy (apical compartment). Many women have a prolapse in more than one compartment at the same time.

How is a sacrocolpopexy done?

- The operation is done under general anaesthetic. A general anaesthetic will mean you will be asleep during the entire procedure.
- The operation of sacrocolpopexy has been performed for about 20 years but the technique has improved over time.
- The operation of sacrocolpopexy can be done through an open operation or laparoscopically (key hole). The open entry means a horizontal or bikini incision is made in the lower abdomen (tummy) and laparoscopically there are 3-4 small incisions on the tummy. To date, studies have not shown any difference between the two techniques for successful repair of the prolapse, however there is evidence that the laparoscopic (key hole) operation results in less blood loss, fewer wound infections and a shorter hospital stay. The decision about the way in which the surgery is performed depends on a number of factors and will need to be discussed with your surgeon.
- The vagina is suspended by using one end of a synthetic mesh with the other end being stitched or stapled (titanium staples) to a prominent part of the back bone (the sacral promontory) internally.
- The mesh remains permanently in the body.
- A urinary catheter is often left in place, usually overnight.

Other operations which may be performed at the same time

- The ovaries and fallopian tubes can be removed with your prior consent and this will be discussed with you before the operation.
- Vaginal repairs - Sometimes there is also a prolapse of the front (anterior) or back (posterior) walls of the vagina and your doctor may suggest repairing them at the same time as your sacrocolpopexy, which is quite common. This may alter the risks of the operation, for example, painful intercourse (sex) is more likely if a repair is done, although it is still uncommon. You should, therefore, discuss this with your doctor who may have an extra information leaflet for you about vaginal wall repairs.
- Continence Surgery - sometimes an operation to treat any bothersome urinary leakage can be performed at the same time as your sacrocolpopexy. Some gynaecologists prefer to do this as a separate procedure at a later date. You should also refer to an information leaflet about the planned additional procedure.
Benefits

A sacrocolpopexy helps to restore the normal position of the vagina, thereby relieving the symptoms of prolapse without shortening the vagina. Common symptoms that are relieved are a lump/bulge within or protruding out of the vagina and a dragging sensation.

The operation is successful in supporting the vaginal vault in 9 out of 10 cases, and may also help to treat prolapse of the front or back wall of vagina. Initially success rates of about 70% were reported but more recently reported success rates over 3-5 years are 90%. No success rates are yet available for longer than this. The degree of success of a sacrocolpopexy depends on a number of factors.

If a sacrocolpopexy is done laparoscopically (key hole surgery) there are advantages such as minimal blood loss and shorter length of hospital stay.

Risks

General Risks of Surgery

- **Anaesthetic risk.** This is very small unless you have specific medical conditions, such as a problem with your heart, or breathing. Smoking and being overweight also increase any risks. Sacrocolpopexy is performed with you asleep (a general anaesthetic). This will be discussed with you.
  - **What can I do?** Make the anaesthetist aware of medical conditions such as problems with your heart or breathing. Bring a list of your medications. Try to stop smoking before your operation. Lose weight if you are overweight and increase your activity.

- **Bleeding.** There is a risk of bleeding with any operation. It is rare that we have to transfuse patients after their operation.
  - **What can I do?** Please let your doctor know if you are taking a blood-thinning tablet such as warfarin, aspirin, clopidogrel or rivaroxaban as you may be asked to stop them before your operation.

- **Infection.** There is a small risk of infection with any operation (about 5 to 13 cases in 100 operations). If it occurs, an infection can be a wound infection or a urinary infection, and is usually treated with antibiotics. The risk of infection is reduced by routinely giving you a dose of antibiotic during your operation. Chest infection may also occur because of the anaesthetic.
  - **What can I do?** Treat any infections you are aware of before surgery. After surgery, regular deep breathing exercises can help prevent chest infections; the nurses will guide you how to do this.
• **Deep Vein Thrombosis (DVT).** This is a clot in the deep veins of the leg. Occasionally this clot can travel to the lungs (pulmonary embolism) which can be very serious and in rare circumstances it can be fatal (less than 1 in 100 of those who get a clot). The risk increases with obesity, severe varicose veins, infection, immobility and other medical problems. The risk is significantly reduced by using special stockings and injections to thin the blood.

  o **What can I do?** Stop taking any hormones such as hormone replacement therapy (HRT) and some types of birth-control pills 4 weeks before surgery. These can usually be restarted 4 weeks following surgery when the risk of blood clots has reduced. Do not arrange surgery the day after a long car journey or flight. As soon as you are awake start moving your legs around. Keep mobile once you are at home and continue to wear your compression stockings during times when you are less mobile.

• **Wound complications.** Wounds can become infected or occasionally stitches can become loose allowing the wound to open up or tighten causing discomfort. There are no wounds within the vagina for this operation, but there may be if there has been an additional vaginal operation at the same time.

  o **What can I do?** Keep any wounds clean and dry external wounds carefully after washing using a clean towel or a hairdryer on a cool setting. If there are vaginal wounds from a vaginal repair do not douche the vagina or use tampons.

**General risks of prolapse surgery**

• **Getting another prolapse.** Although this operation is very successful in treating vaginal vault prolapse, it does not always stop you from getting a prolapse of the vaginal walls in the future. There is very little published evidence of exactly how often prolapse recurs. Recurrence of the same prolapse probably occurs in about 1 in 10 cases but it is generally believed that about 3 in 10 women who have an operation for prolapse will eventually require treatment for another prolapse. This is because the vaginal tissue is weak. Sometimes even though another prolapse develops it is not bothersome enough to require further treatment.

  o **What can I do?** Keeping your weight normal for your height (normal BMI), avoiding unnecessary heavy lifting, and not straining on the toilet, may help prevent a further prolapse, although even if you are very careful it does not always prevent it.

• **Failure to cure** symptoms. Even if the operation cures your prolapse it may fail to improve your symptoms.
• **Overactive bladder symptoms** (urinary urgency and frequency with or without incontinence) usually improve after the operation, but occasionally can start or worsen after the operation.
  
  o **What can I do?** If you experience this, please let your doctor know so that treatment can be arranged.

• **Stress incontinence** Having a large prolapse sometimes causes some kinking of the tube through which you pass urine (urethra). This can be enough to stop urine leaks on coughing, laughing or sneezing. By correcting the prolapse this kink gets straightened out and the leaks are no longer stopped. It is difficult to define an exact risk but it is reported to be in the order of 10% (1 in 10).
  
  o **What can I do?** Doing pelvic floor exercises regularly can help to prevent stress incontinence.

• **Bladder emptying or voiding problems** generally improve after surgery for prolapse but there may be problems emptying the bladder in the first few days. Your doctor may wish to do bladder tests (urodynamics) prior to surgery to predict post-operative voiding difficulties. There can be persistence of voiding problems in 1 in 10 women.
  
  o **What can I do?** If you experience difficulty passing urine, you may wish to lean forwards or even stand slightly to allow better emptying of your bladder. Make sure that you have your legs apart than having your knees together when sitting on the toilet. Waiting for two minutes after the initial void and trying again may help. This is known as the double void technique.

• **A change in the way your bowel works**. Some patients experience worsening constipation following surgery. This may resolve with time. It is important to try to avoid being constipated following surgery to reduce prolapse recurrence.
  
  o **What can I do?** If you are struggling with constipation after simple changes in diet and fluid intake, your doctor/GP may prescribe some laxatives.

• **Painful sexual intercourse**. Once the abdominal wounds are comfortable, there is nothing to stop you from having sex. The healing usually takes about 6 weeks. Some women find sex is uncomfortable at first, but it gets better with time. Occasionally pain on intercourse can be long-term or permanent. Pain on intercourse is less common after this surgery than after vaginal surgery.

• **Altered sensation during intercourse**: Sometimes the sensation during intercourse may be less and occasionally orgasm may be less intense. On the other hand repair of your prolapse may improve it.

**Specific risks of Sacrocolpopexy**

• **Damage to local organs**. This can include bowel, bladder, ureters (tubes from kidneys to the bladder) and blood vessels. The risk of bladder injury is about 1 in 200 procedures and bowel injury about 1 in 1000. Damage to the ureters is even
less common. The damaged organ is repaired at the same time and this may delay your recovery. Sometimes, it is not detected at the time of surgery and therefore may occasionally require a return to theatre. A bladder injury will need a catheter to drain the bladder for 7-14 days following surgery. Injury to the rectum (back passage) may require a temporary colostomy (bag) in rare circumstances and inserting the mesh may be delayed till a later date.

- **Mesh exposure/erosion:** There is a small risk of mesh erosion into the adjacent organs such as bladder, bowel or vagina. Although this is uncommon this may require a repeat operation to trim the mesh and in severe cases may compromise the results of operation. It may also cause pain with sexual intercourse but this is less common than for the alternative surgery performed through the vagina.

- **Infection of mesh:** The mesh and/or the tissues attached to it may get infected but this is uncommon. This is usually treated by antibiotics and in rare cases, by removing the mesh.

- **Inflammation of sacral bone (osteomyelitis) is serious, but rare.**

- Sometimes even if it is planned a laparoscopic approach is not possible and conversion to a laparotomy (open surgery) may be required or you may be advised to have an open surgery from the outset. Occasionally it is not possible to perform the operation due to scar tissue from previous surgery or infection.

**Before the operation - Pre-op assessment**

Usually you are seen in a preoperative clinic some weeks before your planned operation. At that visit you will be seen by a nurse and possibly also a doctor. You will be asked about your general health and any medications you take. Your blood pressure will be checked and you may have tests to assess your heart and breathing. Blood tests will be taken to check you for anaemia and other things according to your medical condition. Swabs may be taken from your nose and groin to make sure that you do not carry MRSA (bacteria that are very resistant to antibiotics and may cause problems after your operation). You may be asked to sign a consent form if this has not been done already.

**After the operation - in hospital**

- **Pain relief.** Pain can be controlled in a number of ways depending on the preference of your anaesthetist and/or gynaecologist. Options are an epidural, injection of local anaesthetic into the tissues during the operation, self-administration of pain relief (patient controlled analgesia - PCA), drugs in a drip, tablets or suppositories. The wounds following laparoscopic (keyhole) surgery are not normally very painful but sometimes you may require tablets or injections.
for pain relief. It is often best to take the pain killers supplied to you on a regular basis aiming to take a pain killer before the pain becomes a problem. If you have had an open operation you may need more pain relief.

- **Drip.** This is to keep you hydrated until you are drinking normally. The drip is usually removed within 24 hours.

- **Catheter.** You may have a tube (catheter) draining the bladder. The catheter may give you the sensation as though you need to pass urine but this is not the case. It is usually removed the morning after surgery or sometimes later the same day.

- **Drain.** If there has been more than average bleeding during the operation a drain (tube) from inside the tummy to outside may be placed beside a wound to let any blood which has collected. This is usually taken out the next day.

- **Vaginal bleeding.** There may be slight vaginal bleeding like the end of a period after the operation.

- **Eating and drinking.** You can drink fluids soon after the operation and will be encouraged to start eating as soon as tolerated.

- **Preventing DVT (deep vein thrombosis).** The same day or the day after your operation, you will be encouraged to get out of bed and take short walks around the ward. This improves general wellbeing and reduces the risk of clots in the legs. You may be given a daily injection to keep your blood thin and reduce the risk of blood clots until you go home or longer in some cases.

- **Going home.** You are usually in hospital for one or two days. If you require a sick note or certificate please ask.

**After the operation – at home**

- Mobilisation is very important; using your leg muscles will reduce the risk of clots in the back of the legs (DVT).

- Bath or shower as normal.

- You are likely to feel tired and may need to rest in the daytime from time to time for a month or more, this will gradually improve.

- It is important to avoid stretching the repair particularly in the first weeks after surgery. Therefore, avoid constipation and heavy lifting. The deep stitches dissolve during the first 3 months and the body will gradually lay down strong scar tissue over a few months.

- **Avoiding constipation**
  
  Drink plenty of water / juice
Eat fruit and green vegetables especially broccoli

Plenty of roughage e.g. bran / oats

- Any constant cough is to be treated promptly. Please see your GP as soon as possible.
- At 6 weeks gradually build up your level of activity.
- After 3 months, you should be able to return completely to your usual level of activity.
- You should be able to return to a light job after about 6 weeks, a busy job in 12 weeks. Avoiding unnecessary heavy lifting will possibly reduce the risk of the prolapse recurring.
- You can drive as soon as you can operate the pedals and look over your shoulder without discomfort, generally after three weeks, but you must check this with your insurance company, as some of them insist that you should wait for 6 weeks.
- You can start having sex whenever you feel comfortable enough after about 6 weeks. You will need to be gentle and may wish to use lubrication.
- You usually have a follow up appointment anything between 6 weeks and 6 months after the operation. This maybe at the hospital (doctor or nurse), with your GP or by telephone. Sometimes follow up is not required.

**What to report to your doctor after surgery**

- Heavy vaginal bleeding
- Smelly vaginal discharge
- Severe pain
- High fever
- Pain or discomfort passing urine or blood in the urine
- Difficulty opening your bowels.
- Warm, painful, swollen leg
- Chest pain or difficulty breathing
Treatment Alternatives

Non-surgical

- **Do nothing.** If the prolapse is not too bothersome treatment is not necessarily needed. If, however, the prolapse permanently protrudes through the opening to the vagina and is exposed to the air, it may become dried out and eventually ulcerate. Even if it is not causing symptoms in this situation it is probably best to push it back with a ring pessary (see below) or have an operation to repair it. Weight reduction in overweight women and avoiding risk factors such as smoking (leading to chronic cough), heavy weight lifting jobs and constipation may help with symptom control. The prolapse may become worse with time but it can then be treated.

- **Pelvic floor exercises (PFE).** The pelvic floor muscles support the pelvic organs. Strong muscles can help to prevent a prolapse dropping further. PFE are unlikely to provide significant improvement for a severe prolapse protruding outside the vagina. A women’s health physiotherapist can explain how to perform these exercises with the correct technique. It is important that you try the above to help to manage the symptoms of your prolapse and to prevent it becoming worse. It is also very important to continue with your pelvic floor exercises even if you have opted for other treatment options.

- **Pessary.** A vaginal device, a pessary (see images below), may be placed in the vagina to support the vaginal walls. A pessary is usually used continuously and changed by a doctor or nurse every 4 to 12 months depending upon the type used and how well it suits you. Alternatively, if you prefer, you may be taught to replace the pessary yourself. It is possible to lead a normal life with continuation of activities such as bathing, cycling, swimming and, in some cases, sexual intercourse. Ongoing care is often at the GP practice but some women will need to be kept under review in the Gynaecology clinic. Pessaries are very safe and many women choose to use one long term rather than have an operation. On occasions their use has to be discontinued due to bleeding, discharge, sexual difficulties or change in bladder function but these all stop quickly after removal. Sometimes it will take several visits to the clinic to determine the best size for you. A pessary is not suitable for all women.
The following table lists the different operations that can be considered to treat **vaginal vault prolapse** (after a previous hysterectomy). Further information on the operations is available in separate leaflets. All operations are not available in all hospitals. Your consultant may recommend a particular operation depending on his or her preference and expertise, or your individual needs.

<table>
<thead>
<tr>
<th>Surgical Treatment</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td><strong>Sacrocolpopexy</strong> -</td>
<td>Mesh provides strong and continuing support to the vaginal vault reducing the chance of prolapse recurrence.</td>
<td>Requires a general anaesthetic (asleep) for laparoscopic or open surgery</td>
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<td>laparoscopic (key hole) or abdominl (open operation) (described in this leaflet)</td>
<td>May also treat a co-existing vaginal prolapse. No cuts or stitches in vagina. Vaginal length maintained. Minimal blood loss and shorter length of hospital stay with laparoscopic approach.</td>
<td>As mesh is used there is a small risk that the mesh will work its way into surrounding tissues.</td>
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<tr>
<td><strong>Vaginal Sacrospinous Fixation</strong></td>
<td>No abdominal incision(s) Can be done with you awake or asleep</td>
<td>Can cause temporary buttock pain</td>
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<tr>
<td>(stitches to support top of the vagina inserted through vagina)</td>
<td></td>
<td>Variable long-term success with recurrence of prolapse in 14-30%.</td>
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<tr>
<td><strong>Colpocleisis</strong> (closing of vagina)</td>
<td>High success rates (90-95%) for prolapse of the vaginal vault and the walls of the vagina No abdominal incision(s) Can be done with you awake or asleep</td>
<td>Sexual intercourse will never be possible after this operation. Urinary incontinence in the future may be more difficult to treat</td>
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More information

If you would like to know more about uterine prolapse and the treatments available for it, you may try the following sources of information.

- Ask your GP.
- Ask the Doctor or Nurse at the hospital.

Look at a website such as


Patient UK at http://patient.info/health

Royal College of Obstetricians and Gynaecologists Recovering Well leaflet (no specific leaflet for sacrocolpopexy) at


International Urogynaecology Association (IUGA) patient information leaflet – Sacrocolpopexy at


Patient information leaflets for you own hospital and others (usually available on line)
**Acknowledgements**

Miss Farah Lone, BSUG patient information committee project lead for this leaflet, on behalf of BSUG.

Miss Farah Lone, Consultant Urogynaecologist, Royal Cornwall Hospitals for the photograph of vaginal pessaries.

Miss Swati Jha, Consultant Urogynaecologist, Sheffield Teaching Hospitals for the diagram of sacrocolpopexy.
Making a decision - things I need to know before I have my operation.

Please list below any questions you may have, having read this leaflet.

1) ..............................................................................................................

2) ..............................................................................................................

3) ..............................................................................................................

Please describe what your expectations are from surgery.

1) ..............................................................................................................

2) ..............................................................................................................

3) ..............................................................................................................