NHS
Gloucestershire Hospitals
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Patient Information

Sacrocolpopexy

Introduction

This leaflet gives you information about vaginal vault prolapse and its repair, known as sacrocolpopexy.

What is a vaginal vault prolapse?

A prolapse occurs when one or more of the pelvic organs, (uterus, bladder, and bowel), the pelvic floor muscles, vaginal walls, or their attachments (ligaments) become weak. This causes the pelvic organs and/or vaginal walls to bulge downwards (herniate) into the vagina or in more severe cases, outside the vagina.

When you have had a hysterectomy, the term 'vault' is used to describe where your uterus (womb) would have been attached to the top of the vagina. A vaginal vault prolapse is where the top of the vagina drops down into the vagina. In time it may bulge out of the body through the vaginal opening.

A vaginal vault prolapse is often accompanied by prolapse of the walls of the vagina, such as a rectocele (a bulge of the back wall of the vagina) or a cystocele (prolapse of the front wall of the vagina).

Sometimes, further vaginal surgery is needed to correct such prolapses at the same time as a sacrocolpopexy procedure. Your surgeon will discuss this with you.

About sacrocolpopexy and the mesh used

Sacrocolpopexy is a procedure for women who have developed vaginal vault prolapse (prolapse of the top of the vagina) following a hysterectomy (removal of the uterus/womb).

Sacrocolpopexy corrects the prolapse using a strip of permanent synthetic (man-made) mesh to lift the top of the vagina and hold it in place. The mesh material is made of woven polypropylene or Prolene (a net like type of plastic).

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The mesh is used to attach the top of the vagina from inside to the ligaments over the sacrum (base of the lower back). This mesh will support the vagina and prevent it from dropping down.

The operation is performed under a general anaesthetic (while you are asleep) either using laparoscopy (keyhole surgery) or through a laparotomy (abdominal cut).

Why mesh is used and what is the difference with vaginal meshes?

In this operation, the mesh reinforces the support that would usually be provided by your own tissue or ligaments (attachments). In the event of prolapse, these forms of natural support have become damaged or weakened, so can no longer hold the skin or organ in its normal position.

You might have heard about the mesh problems that occur when mesh is used in the walls of the vagina or around the bladder through a cut in the vagina. Although this is the same type of mesh, it is placed through an abdominal (tummy) technique and it is considered to be safer with a reduced complication risk compared to vaginal mesh insertion. Your team will discuss this with you.

What conditions lead to vaginal prolapse?

Prolapse happens over a period of time. It is usually caused by the weakening or injury to the supporting muscles and ligaments of the pelvic floor.

This can be as a result of childbirth, connective tissue weakness, being overweight, heavy lifting, chronic constipation, smoking, a lack of hormones after the menopause or a combination of these. Many women will have a prolapse of some degree after childbirth; it is not unusual and unless you have symptoms you will not need treatment. Hysterectomy can also further weaken/remove the supporting structures.

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What are the symptoms of prolapse?

Symptoms may vary depending on the type and degree of prolapse. Usually symptoms are worse at the end of the day. In general, the symptoms can include:

- A dragging feeling, heaviness or lump in the vagina

Difficulty in opening your bowel or bladder

- Difficulty with intercourse or having a loose sensation in the vagina

Pain is not usually a symptom of prolapse. Some women with prolapse may not have any symptoms in which case no treatment is required.

What are the alternative non-surgical treatments?

Do nothing

If the prolapse (bulge) is not troubling you greatly then surgery may not be necessary. If, however the prolapse is outside the vagina and exposed to the air, it can become dried out and eventually become ulcerated. Even if it is not causing symptoms, in this situation we would recommend supporting it back inside the vagina with a vaginal pessary (see below).

Pelvic Floor Exercises (PFE)

The pelvic floor muscles form a bowl at the bottom of your pelvis. These muscles support your pelvic floor organs (uterus, vagina, bladder and rectum). Every muscle in the body needs exercising to keep it strong so that it functions properly.

PFE help strengthen the pelvic floor muscles and therefore give more support to the pelvic organs.

These exercises may not get rid of the prolapse completely but they can make you more comfortable and are best taught by an expert (usually a physiotherapist). These exercises have little or no risk and even if surgery is required at a later date, they can help to strengthen the area before surgery. Please discuss with your surgeon for a referral to a physiotherapist.

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Vaginal pessaries

- **Ring pessary**
  This is a ring made of PVC which is inserted inside the vagina to push the prolapse back up. This usually gets rid of the dragging sensation and can sometimes improve bladder and bowel symptoms. The ring pessary is very popular and needs to be changed every 6 months. This can be done by your GP or practice nurse. We can show you an example of one in clinic, please ask.

  Some couples find that the ring pessary can interfere with intercourse, however intercourse is possible. Ring pessaries are not always suitable and do not always stay in place. If this is the case a shelf or Gellhorn pessary may be recommended.

- **Shelf pessary**
  This is a different shape pessary which cannot be used if you are sexually active. The shelf needs to be checked every 6 months and is usually inserted in hospital by a specialist nurse or doctor.

- **Gellhorn pessary**
  This pessary is made of silicone which is softer than the shelf pessary. The Gellhorn pessary is not suitable for sexually active women. This pessary will also need to be checked every 6 months by a hospital specialist nurse or doctor.

What are the benefits of sacrocolpopexy?

This procedure is successful in 90 out of every 100 operations. The vaginal vault will be firmly supported with the strong mesh and any prolapse symptoms you have had should resolve.

If the operation is done using keyhole surgery there will be less disruption to other organs such as the bowel and bladder. The recovery time will also be quicker.

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Are there any risks with this operation?

Sacrocolpopexy is considered major surgery and as with all surgery and there are associated risks that you need to be aware of when deciding on the right treatment for you. The risks are:

- **Wound or bladder infection**, which are usually treatable with a course of antibiotics.
- **Damage to the bladder or ureters** (tubes which drain the kidneys); affecting 1 to 2 in every 100 women.
- **Damage to the bowel**; very rarely encountered with risk of about 1 or 2 in every 1000 women.
- **Excessive bleeding**. This may occur during the operation with a risk to about 1 in every 100 women.
- **Venous Thromboembolism** (VTE), this is when a blood clot forms in a leg vein, or in the lungs, and happens in about 1 in every 250 women. Treatments will be given to reduce this risk.
- **Prolapse recurrence**. If you have one prolapse, there is an increased risk of having another during your life, especially in the area where no repair was performed. Around 1 in 10 patients will get a recurrence of the same prolapse and 3 in 10 women will require treatment for prolapse of another area at some stage.
- **Failure to cure symptoms**. It is important to understand that even if an operation is successful in treating your prolapse, it may not relieve all of your symptoms.
- **Back pain**. As you will be lying on your back with your legs raised during the operation, this can lead to back pain which is usually short lasting. This can occur more commonly if you have a back pain already.
- **Bladder emptying or voiding problems**. Generally improves after surgery for prolapse but as is the case for any surgery in the pelvic area there may be problems with voiding (emptying your bladder) after the operation. There can be persistence of voiding problems for many months in 1 in 10 women but very few women will have ongoing difficulty or be unable to void long term.

- **Painful sexual intercourse**. Once the abdominal wounds are comfortable and there has been no vaginal surgery at the time of sacrocolpopexy; then 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 during intercourse can be long-term or permanent. Pain during intercourse is less common after this surgery than after vaginal surgery.

Complications which may occur due to the mesh

- **Mesh erosion/exposure** (wear through to the surrounding tissues or vagina). This is rare with a risk of 2 to 3 per every 100 women. There is also a small risk of mesh erosion into the nearby organs such as bladder, bowel or vagina. Although this is very uncommon, the treatment depends on where the mesh has worn through and the symptoms it is causing. In some cases, with minimal or no symptoms, close monitoring alone is required. If there is infection, this can be treated with antibiotics. Sometimes an operation to trim a part of the mesh is performed, which may compromise the results of operation.
  In a small number of more serious cases, an operation may be needed in a specialist centre to remove all or part of the mesh and may also involve an operation on any damaged organs such as the bowel or bladder.
- **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. Sometimes, referral to a specialist hospital is needed in order to remove the mesh. Very rarely infection can occur around the bone (sacrum) where the mesh is attached.
- **Chronic pelvic pain.** In our experience, this is uncommon and less than 2 in every 100 women may experience pain which continues after the wounds have healed. Usually pain had been present before surgery which has not resolved post operation. Pain is usually managed with pain relief and physiotherapy treatment.

To date, there has been no evidence that autoimmune problems can be caused by meshes.

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Changes in bladder and bowel function

Sacrocolpopexy can help to restore the normal position of the bladder and bowel and therefore improve their function. However, in some women the straightening of the vaginal walls when prolapse is repaired can reveal a pre-existing weakness of the bladder neck and lead to a new incontinence problem. If you already have incontinence, this can persist, sometimes get worse or improve after the operation.Some patients experience worsening constipation following this surgery but this tends to resolve over time. It is important to try and avoid being constipated following surgery to reduce the risk of prolapse recurrence.

Abdominal incision (cut)

Although the aim is to perform the surgery through laparoscope (keyhole incisions), sometimes this is not possible and the need for a laparotomy (wider cut in the abdomen) is required. Occasionally, the operation needs to be converted from laparoscopy to laparotomy (abdominal cut) during surgery, especially if there is significant bleeding or damage to surrounding structures.

Sacrocolpopexy is considered a major surgery but is a relatively safe operation where serious complications are uncommon. All surgery has risks so you and your doctor must discuss these and the benefits of surgery, while also considering any alternative treatments.

What are the concerns with synthetic meshes?

There have been problems with mesh used in prolapse and continence surgery which are inserted through a vaginal incision (cut). Although the same material is used in abdominal surgery such as sacrocolpopexy, the mesh complications appear to be much less.

The complications appear to be significantly reduced by stopping the mesh coming in contact with the surrounding structures by covering the mesh with a layer of skin that lines the abdomen called the peritoneum. With this technique the risk of mesh erosion/extrusion is reduced.

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In a small number of cases, an operation may be needed in a specialist centre to remove all or part of the mesh and may also involve an operation on any damaged organs such as the bowel or bladder.

What will happen before the operation?

Before your admission for surgery you will be asked to attend a pre-admission clinic to make sure that you are fit and well for your surgery.

You will been seen by a nurse practitioner or a doctor who will ask about your general health, past medical history and any medication that you are currently taking. Any necessary investigations (for example, blood tests, ECG, chest X-ray) will be arranged. You will also be given the opportunity to ask any further questions that you may have.

Information about your admission, hospital stay, operation and pre- and post-operative care will be posted to you.

You will be given a questionnaire that you need to fill in before your operation. This is regarding your symptoms and how it affects you on a daily basis. Six months after your surgery the same questionnaire will be sent to you and the result will be reviewed. If there are any problems will get in touch with you.

What will happen when I come into hospital?

You will be asked to come in either the day before or the same day as your operation. An anaesthetist and your surgeon (or a senior member of the team) will explain to you what will happen during the operation including its purpose and the associated risks. You will be asked to sign a consent form, if you have not already done so, and you will have the opportunity to ask any questions not covered during your pre-admission clinic appointment.

How will the sacrocolpopexy be carried out?

The operation is performed under general anaesthetic (while you are asleep). You will have a drip (thin tube) inserted in to a vein in your hand or arm to administer medications. A catheter (a tube for urine drainage) is inserted into your bladder once you are asleep.

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If the operation is performed laparoscopically, there will be at least 4 small incisions on your abdomen for introducing the camera and the instruments. If it is to be performed as laparotomy (open) procedure a cut will be made on lower part of your abdomen.

After careful dissection, a piece of permanent synthetic mesh, is stitched along the back wall, the top and, if necessary, the front wall of the vagina from inside.

The mesh is secured to ligaments over the sacrum (lower backbone). This is to support the vagina and stop it from prolapsing (dropping) down, returning it to its correct position. The mesh is then covered by a layer of tissue called the peritoneum that lines the inside of the abdomen. Eventually, new connective tissue grows into the mesh, which forms a new strong ligament and remains permanently in the body.

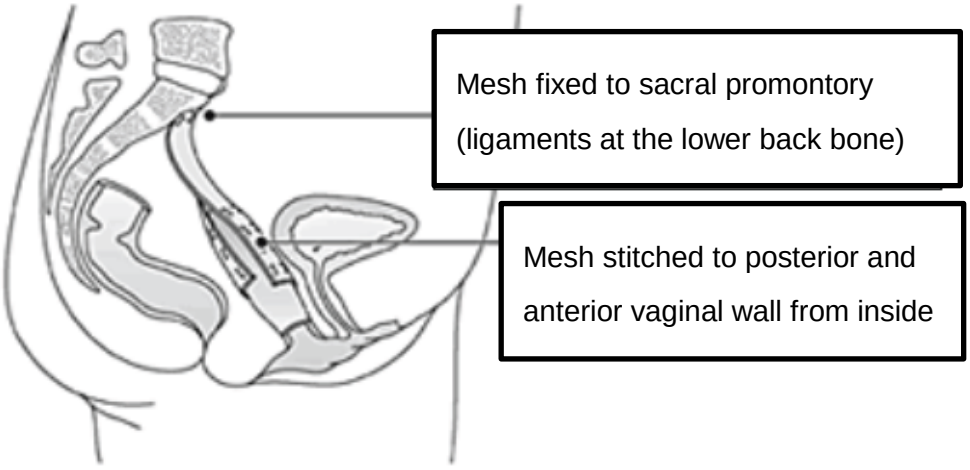

Figure 1: Diagram of sacrocolpopexy

Vaginal repair

Other types of prolapse may result from stretching and weakening of the walls of the vagina such as cystocele (bulging of the bladder through the front wall) or rectocele (bulging of bowel through the back wall). All of these conditions can result in the feeling of something coming down the vagina.

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Following the sacrocolpopexy further repair may be required to correct these kinds of prolapse at the lower part of the vagina. This may be required during your operation or at later date. The repair operation tightens the walls of the vagina and the pelvic floor muscles. All the stitches used are dissolvable.

What happens after the operation?

When you wake up from the anaesthetic you will have a drip (thin tube) in the back of your hand to allow fluids and medications to be given.

The surgeon may place a vaginal pack (swabs inside the vagina) to stop any bleeding into the tissues. There will also be a tube in the bladder (catheter) to avoid urinary retention. The pack and catheter is usually removed the day after surgery.

Will I have pain?
Most people experience some pain or discomfort for the first few days after surgery. You will be offered pain relief to help to reduce the discomfort. This may be by injection, tablets or suppositories. You will be encouraged to take pain relief, as being pain-free will help you to recover more quickly.

Due to the anaesthetic, being in pain, and having strong pain relief can sometimes make you may feel nauseous or sick. This can be relieved by injections or tablets.

Many women get wind pains a few days after the operation which can be uncomfortable and make the tummy look distended (swollen). This should not last long and can be relieved by medicines, eating and walking about.

Will I bleed?
After the operation if you had vaginal repair, you may have some vaginal bleeding and you will need to wear a sanitary pad. We advise you not to use tampons. Your vaginal discharge should change to a creamy colour over the next 2 to 3 weeks. If you have any new pain, fresh bleeding, or a bad smelling discharge after you go home, you should contact your GP.

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Will I have stitches?
You have some stitches on the small incisions on your abdomen; these normally dissolve 2 to 3 weeks after your operation. If you have had a vaginal repair, you will have vaginal stitches - these are dissolvable. Threads may come away for up to three months, this is normal.

How will I cough?
If you need to cough, your stitches will not come undone. You will be wearing a sanitary towel, and coughing will hurt less if you press on your pad firmly to give support between your legs.

When will I go home?
After a sacrocolpopexy, most women stay in the hospital for about 2 days. Recovery time varies from woman to woman. It is important to remember that everyone's experience is different, and it is therefore best not to compare your own recovery with that of others on the ward.

When can I return to my usual routine?

Recovery is a time consuming process, which can leave you feeling tired, emotionally low or tearful. Although the scars from laparoscopic (keyhole) surgery are small, this does not shorten the healing process. The body needs time and help to build new cells and repair itself.

Depending on the surgery you have had and the nature of your work, you will need to take 4 to 6 weeks off work to recover. If you require a sick note, please ask.

Sex after the operation
Healing usually takes about 6 to 8 weeks, so penetrative intercourse is not advised during this period.

Some women find penetrative intercourse uncomfortable at first but it gets better with time and may improve if you use a lubricant, such as vaginal moisturisers or topical oestrogen cream or pessaries.

Do expect things to feel a little different after the operation as the vagina will be suspended and therefore under slight tension. Sometimes, sensation during sex may be reduced and you may find it more difficult to achieve orgasm.

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Weight and exercise

Reduced levels of activity and an increase in appetite may add to you putting on extra weight. It is important to continue to exercise following surgery. After 6 weeks you can gradually build up your level of activity, and after 3 months you should be able to return to your usual level of activity. You should try to avoid any unnecessary heavy lifting to reduce the risk of the prolapse recurring.

Low impact exercises such as cycling and swimming are equally as good and have less impact on pelvic floor.

Follow up

A follow-up appointment will be arranged after surgery to assess your recovery. This will be either as a telephone follow up, clinic appointment or a questionnaire. The clinic appointment will be sent to you through the post.

You should contact your GP or gynaecology team if you notice any of the following:

- An increase in your temperature.
- Warm, painful, swollen leg.
- Chest pain or difficulty breathing.
- Swelling around your wound or tummy.
- Pain that is getting worse.
- Discharge from your wounds or vagina.
- Blood in your urine.
- If you are unable to open your bowel.

Contact information

If you have any problems or concerns after going home, please contact your own GP or if out of normal working hours NHS 111 for advice.

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Alternatively you can contact the hospital, either the ward you were discharged from or an Advanced Urogynaecology Practitioner.

Advanced Urogynaecology Practitioner
The Women's Centre
Gloucestershire Royal Hospital
Tel: 0300 422 6246
Tel: 0300 422 6278
Monday to Friday, 8:00am to 4:00pm

Further information

NICE
Patient decision aid about choice of procedure for prolapse of the vaginal vault

Website:
https://www.nice.org.uk/guidance/ng123/resources/patient-decision-aid-pdf-6725286114

Sacrocolpopexy using mesh for vaginal vault prolapse repair. National Institute for Health and Clinical Excellence, June 2017
Website: https://www.nice.org.uk/guidance/ipg583

British Society of Urogynaecology
Website:
https://bsug.org.uk/budcms/includes/kcfinder/upload/files/info-leaflets/SCP%20BSUG%20July%202017.pdf

Bladder & Bowel UK
Helpline: 0161 214 4591
Monday to Friday, 9:00am to 4:30pm
Email: bbuk@disabledliving.co.uk
Website: www.bbuk.org.uk

Patient
Website: https://patient.info/womens-health/genitourinary-prolapse-leaflet

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